

Report of Findings

**For the September 26 through 29, 2005 Excavation of Contaminated Soil
Phase II**



Site:

**Big Oil & Tire Rohnerville BP Mini Mart (Rohnerville 76)
3663 Rohnerville Road
Fortuna, California 95540**

LOP # 12340

Prepared for:

Big Oil & Tire Co.

Dated:

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1.0 EXECUTIVE SUMMARY

In September 2005, SounPacific Environmental Services (SounPacific) oversaw the excavation and disposal of impacted soil at the leaking underground facility tank (LUFT) site located at 3663 Rohnerville Road, Fortuna, California (Rohnerville 76). The work was conducted at the request of Big Oil & Tire Co. (BO&T), the responsible party for the cleanup of Rohnerville 76 (the Site). Based on findings of all the activities, including visual observations, field screening, and laboratory analytical results, SounPacific concludes the following:

- During September 26-29, 2005, SounPacific supervised the excavation and removal of soil impacted with petroleum hydrocarbons that had been identified during the removal of the Site's underground storage tanks (USTs) and subsequent subsurface site investigations. Using a clean-up standard of 100 parts per million (ppm) for total petroleum hydrocarbons as gasoline (TPHg) (certified laboratory data) and a field screening standard of 400 ppm with a organic vapor analyzer (OVA) with a photoionization detector (PID), impacted soil was excavated and removed from the Site.
- Once field screening indicated that the clean-up standard had been achieved and/or property boundaries, and/or limits of equipment, and/or structural integrity issues prevented further excavating, nine (9) sidewall soil samples were collected at various locations around the perimeter (sidewalls) of the excavation and thirteen (13) soil samples were collected from the excavation bottom. Lateral excavation was halted by surface constraints such as property lines and existing structures to the north, northwest, and northeast, while vertical excavation was extended to the maximum depth achievable by the excavation equipment. Laboratory analysis of the confirmation samples indicated that the clean-up standard had largely been met, although limited impacted soil exceeding the clean-up standard remains in the bottom

of the excavation, along the northern, north western, and northeastern walls of the excavation area along with a thin ring of soil separating the Phase I excavation area from the Phase II excavation area.

- A total of 459.64 tons (approximately 300 cubic yards) of petroleum-impacted soil was excavated and transported to Bio Industries in Red Bluff, California for disposal.

2.0 INTRODUCTION

This report was prepared by SounPacific on behalf of BO&T, the responsible party for the investigation and cleanup of the Rohnerville 76 facility, to document the findings of the September 2005 removal of impacted soil that was conducted at the Site. The purpose of this *Report of Findings* is to present and discuss the recent activity, sampling activity and results, interpret the soil analytical results, and provide recommendations for future activity.

This soil removal occurred after receipt of approval letters from the Humboldt County Department of Health and Human Services: Division of Environmental Health (HCDEH) dated October 21, 2004, March 30, 2005, and July 25, 2005. The soil excavation followed the scope of work outlined in the approved *Interim Soil Excavation Workplan*, dated March 31, 2004. All work was conducted in accordance with Section 2724 of the California Underground Storage Tank Regulations.

2.1 Scope of Work

Based on a review of North Coast Regional Water Quality Control Board (NCRWQCB) and HCDEH files, the scope of work consisted of:

- Excavation of areas of known impacted soils
- Verification sampling of soil following EPA guidelines for SW 846 Method 5035 and analysis using EPA Methods 8260
- Completion of this *Report of Findings* discussing the excavation activity and future recommendations.

2.2 Site Location

The Site is located in Fortuna, California, with a physical street address of 3663 Rohnerville Road, Fortuna, California. The nearest major cross street is Redwood Way, which is located

just north of the Site off Rohnerville Road. The station is positioned adjacent to the eastern side of Rohnerville Road. The Site is approximately 1.5 miles southeast of downtown Fortuna.

2.3 Site Description

The Site is surfaced around the current structure, single story building, with cement and asphalt. Site improvements include the single story building with an attached canopy that covers two dispenser islands. The main structure is located in the center of the property with the entrance to the building facing west towards Rohnerville Road. There is currently one (1) 12,000-gallon unleaded gasoline UST (tank 1), one (1) 6,000-gallon premium gasoline UST (tank 2), and one (1) 6,000-gallon Diesel UST (tank 3) contained in a single excavation, which is located to the north of the building (Figures 1 and 2). The Site is serviced by public utilities. Surface water is controlled by storm drains.

2.4 Vicinity Description

The surrounding land use in the immediate vicinity is a mixture of residential, commercial, and rural. Habersstock Construction and Habersstock Surveying lie adjacent to the northern side of the Site. Rohnerville Road runs adjacent to the western border of the Site. A U-Haul Center is adjacent to the southern border of the Site. Pastureland lies directly east of the Site, and residential properties are located west of Rohnerville Road.

2.5 Hydrogeologic Setting

The Site is located approximately 11.5 miles east of the Pacific Ocean and 1.5 miles east of the Eel River. Strongs Creek, a tributary of the Eel River, is located approximately 2,100 feet northwest of the Site. Jameson Creek, a tributary of Strongs Creek, is located approximately 1,500 feet southwest of the Site and flows into Strongs Creek approximately 2,750 feet west of the Site. The Site elevation is approximately 109 feet above mean sea level (amsl). Site

topographical features include a gentle slope to the northwest with no noticeable depressions or drainages.

The area is underlain by the Rohnerville Formation of Late Pleistocene age consisting of non- to poorly-indurated fluvial deposits. The Rohnerville Formation consists predominantly of sand, gravel, silt, and clay.

Shallow, perched groundwater is present at the Site much of the year. Perched groundwater was encountered at depths as shallow as one (1) to four (4) feet during drilling in winter, spring, and early summer. The September 2005 excavation activity clearly demonstrated the perched nature of the water as the pit remained virtually dry to a depth of 16.5'. The shallow hydrology beneath the Site is currently poorly understood due to the lensoidal nature of the underlying material. There is no information at present regarding the interconnectivity of the lenses at the Site. Based on the distribution of the contaminants, extending to the northwest from the gasoline USTs, a natural northwesterly groundwater flow direction beneath the Site is predicted. Since both the Phase I excavation, to a depth of 21 feet +/- and the Phase II excavation, to a depth of 16.5 feet +/-, were backfilled with pea gravel, the natural hydrology of the area no longer exists. In almost all such circumstances, the pea gravel in each area fills with groundwater each of which then serve as a recharge area. Groundwater may be flowing radially away from the excavation areas at this time.

2.6 Current Site Usage & UST History

SounPacific understands that the property is owned by BO&T of Arcata, California. The main structure is used as a retail gas station for the retail dispensing of two (2) grades of gasoline from the USTs onsite. A mini-mart that is combined with a cashiers' office is located inside the main structure.

In March 1991, Sessions Tank Liners, Inc. (Sessions) exposed the top of the former 660-gallon waste oil UST and steam cleaned the interior. In November 1992, the three gasoline USTs were lined with epoxy materials by Sessions and an electronic tank level monitoring

system was installed. In December 1995, Beacom Construction Company of Fortuna (Beacom) removed the 660-gallon waste oil UST.

3.0 PREVIOUS INVESTIGATIONS

Previous studies from Clearwater Group, Inc. (CGI) and SounPacific indicated the following previous investigation information:

3.1 1991 WASTE OIL UST STEAM CLEANING (SESSIONS)

On March 1, 1991, Sessions exposed the top of the 660-gallon waste oil tank and steam cleaned the interior. Kevin Metcalfe with the HCDEH observed the procedure, and in his notes indicated that possible waste oil contamination was visible in soils near the tank, and holes were visible in the tank. An Unauthorized Release Form was filed on April 4, 1991, with the HCDEH.

3.2 1995 WASTE OIL UST REMOVAL (CGI)

On December 12, 1995, the 660-gallon waste oil UST was removed. Two (2) soil samples and one (1) groundwater were collected from the excavation (4.5 feet bgs for soil) (Figures 3 and 4). Soil and groundwater samples were analyzed for TPHg, benzene, toluene, ethylbenzene, and total xylenes (BTEX), TPH as diesel (TPHd), TPH as motor oil (TPHmo), halogenated hydrocarbons, cadmium, chromium, lead, zinc, and creosote. In addition, both soil samples were analyzed for 1, 2-dichloroethane (Tables 1 and 2). The laboratory analysis did not report any contamination of concern in the soil samples, however, significant levels of TPHg and TPHmo (>3,000 ppb) were reported along with select BTEX compounds. Also very high levels of lead and zinc were reported in the groundwater sample.

The material removed from the excavation was placed back into the excavation as little or no impact was detected. Additional clean fill was placed in the remainder of the excavation by Beacom to raise it back to grade.

3.3 1997 PRELIMINARY SITE ASSESSMENT (CGI)

On March 8 and March 9, 1997, CGI performed a subsurface investigation at the Rohnerville 76 facility to evaluate the extent of the impacted groundwater contamination that was identified following the removal of the former 660-gallon waste oil UST, and further assess the surrounding soils. The investigation consisted of two (2) soil borings (SB-1 and SB-2, see Figure 3) that were advanced with a hand auger to depths of nine (9) feet to ten feet bgs. The presence of cobbles and/or rocks prevented further advancement of the borings. Soil samples and groundwater samples were collected from both borings and analyzed for TPHg, BTEX, methyl tertiary butyl ether (MTBE), TPHd, TPHmo, lead, and total oil and grease (TOG) (Tables 1 and 2). With the exception of TPHmo in boring SB-1 at 110 ppm, no contamination of concern was reported in the soil samples. The grab groundwater sample from SB-1, reported TPHg at 100 ppb. No petroleum hydrocarbons were reported in either the soil or groundwater sample from SB-2.

3.4 2000 SUBSURFACE INVESTIGATION (SOUNPACIFIC)

On June 22, 2000, SounPacific staff performed a subsurface investigation, which consisted of advancing four (4) hand auger soil borings (SP-1, SP-2, SP-3, and SP-4) (Figure 3). Soil samples were collected from all borings and a groundwater sample was collected from borehole SP-1. Auger refusal at ten feet bgs prevented the collection of groundwater samples from the remaining borings. On July 19, 2000, Fisch Environmental used a direct push Geoprobe rig to drill a fifth boring (SP-5) for the purpose of collecting a second groundwater sample. Soil and groundwater samples were analyzed for TPHg, BTEX, MTBE, TOG, and TPHmo. In addition, groundwater sample GWSP-5 was also analyzed for four (4) fuel-oxygenates and TPHd (Tables 1 and 2). With the exception of low levels (<15 ppm) of TPHmo in two of the samples, no petroleum hydrocarbons were reported in any of the soil samples. The groundwater sample from SP-1, reported TPHmo at 1,400 ppb.

3.5 2002 SUBSURFACE INVESTIGATION (SOUNPACIFIC)

During May 2002, SounPacific performed a subsurface investigation, which consisted of drilling nine (9) soil borings (B-1, B-2, B-3, B-4, B-5, B-6, B-7, B-8, and B-9) (Figure 3). Soil and groundwater samples were collected from all borings following EPA sampling guidelines as approved in the SounPacific *Subsurface Investigation Workplan*, dated March 5, 2001. All samples were analyzed for TPHg, BTEX, and five (5) fuel-oxygenates. In addition, groundwater samples from boreholes were also analyzed for lead scavengers, TPHd, and TPHmo (Tables 1 and 2). A total of twenty-one (21) soil samples were analyzed, of which fourteen (14) reported the presence of TPHg. However, only one (1) sample reported a concentration greater than 12 ppm, with the majority reporting concentrations less than one (1) ppm. Three (3) of nine (9) groundwater samples reported elevated TPHg concentrations, with the highest concentration in boring B-6, which reported 32,200 ppb. The same sample also reported high levels of BTEX. Six (6) of nine (9) samples reported MTBE, with concentrations ranging from 2.67 ppb to 207 ppb. No MTBE was reported in boring B-6, likely due to an elevated reporting limit of 2,000 ppb. TPHd and TPHmo were reported in three (3) and four (4) samples respectively. The highest TPHd concentration was 5,270 ppb in boring B-6, with the highest TPHmo concentration being 6,660 ppb from boring B-4.

3.6 2004 UST REMOVAL AND PHASE I EXCAVATION (SOUNPACIFIC)

On May 25, 2004, the three (3) USTs onsite were removed by Beacom. The USTs were removed from one excavation located near the north end of the existing structure. Once the USTs had been removed, further excavation was conducted in an attempt to remove the lateral and vertical extent of the soil contamination associated with this older UST system.

During the UST removal and excavation activity, an organic vapor analyzer (OVA) with a PID was used to monitor soil excavation tailings and sidewalls from the tank pit cavity excavation. Following the removal of the USTs, ten (10) soil samples (TPS-1, TPS-2, TPS-3, TPS-4, TPS-5, TPS-6, TPS-8, TPS-9, TPS-10, and TPS-11) (Figures 3 and 4) were collected from the sidewalls adjacent to the ends of the USTs and one (1) groundwater sample (TPGW-

7) was collected from the UST pit for hydrocarbon analyses. Elevated TPHg levels were reported in two (TPS-1 at 730 ppm and TPS-10 at 930 ppm) of the ten (10) soil samples. The same two samples also reported levels of TPHd in excess of 100 ppm. The groundwater sample from the excavation reported TPHg, TPHd, and TPHmo at 500,000 ppb, 390,000 ppb, and 5,400 ppb, respectively, along with significantly elevated levels of BTEX and MTBE (2,8000 ppb). In addition, to remove some of the contaminated groundwater, approximately 2,400 gallons of groundwater was pumped from the excavation into a holding tank, which was removed by Chico Drain Oil on July 20, 2004.

Following the UST system removal, during the period May 26 through June 1, 2004, Beacom removed approximately 185 cubic yards of additional soil from the excavation that was needed for the installation of the new UST system. SounPacific collected thirteen (13) soil samples (Con-12, Con-13, Con-14, Con-15, Con-20, Con-21, TPS-23, TPS-24, TPS-25, TPS-26, TPS-27, TPS-28 and TPS-29) (Figures 3 and 4) from the sidewalls of the excavation. In addition, SounPacific collected seven (7) soil samples (Con-16, Con-17, Con-18, Con-19, TPS-22, TPS-30, and TPS-31) (Figures 3 and 4) from the excavation bottom. Analytical results indicated that further excavation was needed to the northwest near soil samples Con-20 @ 2,900 ppm, Con-21@1,200 ppm, TPS-26@5,000 ppm, and TPS-27@5,800 ppm. However, further excavation was not possible at this time because it would not have allowed the installation of the new USTs due to the space requirements.

The soils from the excavation activities were temporarily stockpiled onsite and stored until sample data to determine the correct disposal method and destination was received. Based on the results obtained during excavation activity, the heavily impacted stockpiled soil was loaded into trucks from Ben's Trucking of Redding, California, and transported to the landfill at Bio Industries in Red Bluff, California. Soil disposal receipts were subsequently submitted along with the disposal receipt for the water pumped from the excavation. An Unauthorized Release Report Form was prepared and submitted on June 1, 2004.

A report dated September 13, 2004, documenting the removal and excavation activities was prepared and submitted to the HCDEH.

4.0 EXCAVATION

The May 2004 excavation did not remove all the contaminated soil, so in September 2005 additional excavation was conducted to remove the impacted soil from the northwest corner of the Site, see Figure 5, that exceeded the 100 ppm clean-up standard. The objective of the soil excavation was to remove the accessible contaminated soil which exceeded 100 ppm TPHg based on laboratory results, and dispose of it at an approved landfill. Pursuant to the approved work plan, cleanup excavation criteria levels for organic vapors by OVA analysis was set at 200 ppm based on OVA field, however, based upon discussion with USTCF engineers the excavation criteria limit was raised to 400 ppm. The laboratory analysis standard for TPHg remained at 100 ppm. Once PID readings were below 400 ppm a soil sample was collected and subsequently submitted to a state certified lab for analysis.

During the period of September 26 through 29, 2005, SounPacific oversaw Beacom conduct the excavation and removal of the impacted soil. As the excavation progressed, field screening using visual observations and field analysis using an OVA with a PID was used to screen soils with the objective to segregate and stockpile non-contaminated soil from impacted soil. Gross contaminant excavation activity continued using the screening method within the property boundaries until the pre-determine clean-up standards were met, or equipment limitations, structural integrity of buildings and other structures onsite, and the property boundaries to the north prevented further excavation.

In addition to the chasing of the contamination, based upon previous sample data, Beacom did trench to the previous location of sample # CON-18 but only a small pocket of soil was identified as heavily impacted; therefore; (less than five (5) cubic yards) was removed. Two (2) confirmation samples were collected from this location after the impacted soil was removed (sample # 21 @ 6' and 22 @ 14') that confirm the cleanup criteria was met in this area. Also, the surface material just below the asphalt was determined to be non-contaminated. This material, totaling approximately 50 tons, was stockpiled and then used as

backfill. Since this material consisted of just a small amount of base under the asphalt, and since there was no subjective evidence of any impact, this material was returned to the excavation without further analysis as approved in the workplan.

4.1 EXCAVATION SCREENING

Excavation at this site was based on field screening samples first by collecting samples from the sidewalls and bottom of the excavation and analyzing them with a portable OVA. Material was collected from these locations by pulling a grab sample from the bucket of a backhoe/excavator and then immediately placing the sample in a clean, zipped, plastic bag. The calibrated OVA probe was placed in the bag and the results were recorded.

Once OVA screening of the soil sample indicated hydrocarbon levels were below 400 ppm, conformation samples were taken on the following basis: one (1) sample per every 400 square feet of excavation bottom, and two (2) samples for every twenty lineal feet of excavation sidewall. Although 24-hour turn-around-time was proposed in the work plan, it became evident during excavation that surface constraints such as structures and property lines would be the controlling factor, not the analytical results. As a result, no samples were submitted to a certified laboratory for confirmation analysis with a TAT time of less than or equal to 24 hours in an effort to save unnecessary costs.

4.2 SOIL SAMPLING

Excavation of contaminated soil commenced on September 26, 2005 in an area of confirmed contamination, and continued until September 29, 2005, when the clean-up objective had been achieved in all accessible areas, and/or property lines were reached, and/or structures were threatened (telephone equipment and lighting) and/or the limit of the excavation equipment was reached. At the completion of the removal activities, an area of approximately 550 square feet, to an average depth of 16 feet bgs and a maximum depth of 21.5 feet, had been excavated. The extent of the soil excavation is shown in Figure 5.

4.2.1 Confirmation Sampling

From September 26 through September 29, 2005, nine (9) soil samples were collected from the excavation sidewalls, along with thirteen (13) soil samples from the floor of the excavation (Figure 5) to confirm that the contaminated soil had been removed. These samples were collected with the purpose of confirming the removal of contamination and documenting the remaining residual soil contamination concentrations at the extent of the excavation. All soil samples from the soil excavation were collected following standard EPA guidelines. All samples were labeled and immediately placed in a cooler, kept just below four degrees Celsius, packed and delivered to Basic Lab, under Chain-of-Custody (COC) documentation, with a separate COC record for each sample.

4.2.2 Disposal Profile Sampling

Previous soil sampling from previous investigation along with conformation samples clearly indicates the presence of hydrocarbon impacted soils above the standard cleanup level of 100 ppm TPHg by laboratory analysis. As a result no new soil samples were collected for disposal profile purposes, with previous analytical results being acceptable.

4.2.3 Soil Analytical Methods

The soil samples were collected following EPA guidelines for SW846 method 5035 and analyzed for TPHg, BTEX, MTBE, and the four (4) additional fuel oxygenates by EPA Method 8260. The samples were also analyzed for TPHd and TPHmo by **EPA Method 8015m**.

4.3 Groundwater Sampling

In addition, as the excavation progressed, groundwater accumulated in the excavation pit. A sample of the groundwater was collected for laboratory analysis. Very little groundwater accumulated in the bottom of the excavation and recharge was slow so no groundwater was removed during the Phase II excavation activity.

4.3.1 Groundwater Analytical Methods

The groundwater sample from the bottom of the excavation was collected following the EPA

guidelines and analyzed for TPHg, BTEX, five (5) fuel-oxygenates, including MTBE by **EPA Method 8260**. The sample was also analyzed for TPHd and TPHmo by **EPA Method 8015m**.

4.4 SOIL ANALYTICAL RESULTS

A total of twenty-two (22) soil samples were collected by SounPacific from the excavation and submitted for laboratory analysis during the Phase II excavation.

4.4.1 Confirmation Sidewall Sampling Results

Nine (9) soil samples were collected from the excavation sidewalls at an average depth of six (6) feet bgs in order to document the residual concentration remaining in soil at the perimeter of the excavation. (Note that no sidewall samples were collected from the ring separating the Phase I from the Phase II excavations areas as this had already been sampled during the Phase I excavation.) The locations of the samples are shown in Figure 5. Of the nine (9) samples, seven (7) confirmation sidewall soil samples reported TPHg concentrations less than one (1) ppm. The remaining samples 7@6' (north wall) and 16@6' (west wall) results were 566 ppm and 157 ppm TPHg, respectively. The excavation could not be extended further to the north or the west due to structures (telephone and lighting equipment), property lines and lack of access agreements and/or encroachment permits.

Thirteen (13) soil samples were collected from the bottom of the excavation at depths ranging from 12 to 16.5 feet. Eight (8) of the analyzed samples met the clean-up standard of less than 100 ppm, with three (3) of the bottom samples reporting less than one (1) ppm for TPHg, and five (5) bottom samples were less than 50 ppm for TPHg. Of the remaining samples, two (2) samples were less than 200 ppm for TPHg, and the remainder of the samples showed a maximum of 615 ppm TPHg. Vertical excavation was halted due to the limits of the excavation equipment and the presence of groundwater. The laboratory results for the soil samples collected from the excavation are summarized in Table 1. The laboratory report for the soil samples from the excavation activity is included in Appendix A.

4.4.2 Disposal Profile Sampling Results

The material was profiled based on prior results, subjective observations, and confirmation sample results, which demonstrated that all excavated material removed for disposal contained in excess of 100 ppm TPHg.

4.5 GROUNDWATER ANALYTICAL RESULTS

One groundwater sample was collected from the excavation pit (WT @ 12.5') for laboratory analysis. Laboratory analysis reported TPHg at 34,700 ppb, along with elevated levels in TPHd and TPHmo ranges. Also significantly elevated levels of the BTEX compounds and fuel oxygenates MTBE and TAME were reported. The analytical results are included in Table 2, with the laboratory report included in Appendix A

4.6 SOIL DISPOSAL

All impacted soils were “hot” loaded and removed from the Site, as there was insufficient space to stockpile any contaminated soil on the Site without jeopardizing existing site improvements. Apparent clean soil was segregated, stockpiled, and used as backfill onsite. Approximately 50 tons of materials were used as clean backfill material, while 459.64 tons of material was disposed of offsite at Bio Industries in Red Bluff, California. Beacom was responsible for all permitting of onsite soil requirements. Copies of manifests and delivery receipts are enclosed in Appendix B. The manifests and delivery receipts indicate the date the material was loaded and the date it was disposed in addition to the tonnage hauled.

Based on an excavation 600 square feet by an average depth of 16 feet, and based on a 1.3 conversion factor from in-place yards to tons, it was estimated that approximately 485 tons of material were excavated. This compares favorably with the disposal of 459.64 tons and reuse of 50 tons as backfill.

5.0 SITE CONCEPTUAL MODEL

The objective of a site conceptual model is to present sufficient information to: (1) identify the source(s) of the contamination; (2) determine the nature and extent of the contamination; (3) specify potential exposure pathways; and (4) identify potential receptors that may be adversely impacted by the contamination.

Information related to site geology and hydrogeology has been determined from the findings of the site investigations conducted at the Site. These investigations have determined that near surface soils consist of gravelly river channel and sandy and silty flood plain deposits, with lesser amounts of alluvial and colluvial deposit. When present, these deposits are characterized by angular rock fragments as distinguished from more rounded river deposits and often interfinger (irregular and wedge shaped contacts) with the river deposits. River deposits commonly form lenses shaped bodies and typically consist of varying quantities of interbedded medium and coarse sands, silts, clays and surrounded gravels. Groundwater level measurements collected during past drilling events and during the excavation event have determined that groundwater levels range from approximately one (1) foot to sixteen feet bgs with an apparent general groundwater flow in a northwesterly direction. The shallow groundwater (less than five (5) feet deep) is apparently perched as virtually no shallow groundwater was encountered during excavation in September 2005.

Elevated TPH concentrations detected during prior site activities indicated the need for remedial action, and as a result, excavation of the contaminated soil was conducted. Previous site investigations had suggested that the soil contamination may have been relatively shallow; however, as the excavation of the impacted soil progressed, field screening indicated that impacted soil was still present in several locations at the maximum depth achievable by the excavation equipment (16 to 21 feet bgs). All accessible impacted soil (in excess of 100 ppm) was removed within the site constraints imposed at the time of excavation.

The groundwater sample collected during the excavation, along with those from previous site activities, suggests the presence of impacted groundwater; however, the groundwater sampled

was in contact with impacted soil so the result may not be representative of the actual groundwater condition at the Site. Subsequent groundwater monitoring is necessary to verify and monitor a groundwater impact.

6.0 SUMMARY AND RECOMMENDATIONS

Soil analytical results collected during the excavation indicate that although the majority of the soil contamination has been removed, residual impacted soil in excess of 100 ppm remains at the Site. Based on past sampling activity, the impacted area may be thin, perhaps being just a few feet thick. Borings should be drilled adjacent to sidewall samples #7 and #16 to determine the lateral extent of the residual impact remaining at the Site. If the impact is only a few feet thick, it is recommended that the impact be allowed to remain in place as the residual amount of impact is limited and poses very little threat to groundwater. Likewise, the residual impacted soil in the bottom of the excavation may be thin as groundwater is shallow beneath the Site and should have prevented any significant vertical migration of petroleum hydrocarbons. One (1) or two (2) borings should be extended through the former excavation (near sample locations #5 and #10) to ascertain the thickness of the remaining impact. The excavation was backfilled with pea gravel. This is a ideal environment for natural attenuation of the impacted soil at the bottom and along the sidewalls of the excavation. However, filling the excavation with pea gravel generally precludes further excavation unless the pea gravel is removed.

Sufficient monitoring wells should be installed at the Site to confirm and define a groundwater impact (if present) and to monitor the groundwater flow direction and gradient over time. Based on these findings, SounPacific proposes the following recommends:

- Drill two (2) borings within three (3) feet of sidewall locations #7 and #16 and collect soil samples at a depth of six (6) feet bgs. Field screen samples and step out four (4) feet if significant contamination still appears to be present at either location. Continue stepping out on four (4) foot increments until the lateral extent of the impact is defined. Confirm that residual impact is thin.

- Drill two (2) borings to the bottom of the former excavation (near #5 and #10). Screen native soil from the bottom of the excavation until it appears the extent of the impact has been defined. Confirm that the residual impact is thin.
- Groundwater contamination is believed to be present, however, the full extent and levels of any groundwater contamination is unknown. To assess the extent and level of the groundwater contamination, three (3) to five (5) groundwater monitoring wells should be installed, with one (1) being in the anticipated down-gradient direction and within ten (10) feet of the former excavation and northwest of the former USTs.
- To evaluate and monitor groundwater contaminant levels, a groundwater monitoring program should be established, which includes the determination of groundwater movement, ranking hydrocarbon concentrations over time, and collecting general groundwater data.
- To date, no sampling has been conducted at the Site to determine if any vertical migration of contaminants has occurred. It is therefore proposed that prior to the installation of the proposed down-gradient monitoring well, a pilot hole be drilled that extends to 30 feet or more below the non-perched water table (estimated at 13 to 16 feet bgs), with soil and groundwater samples being collected at ten foot intervals for laboratory analysis to assess the vertical distribution of any contaminants. The pilot hole should be extended until the second water-bearing zone is encountered or to a maximum depth of 50 feet.
- Upon the completion of the delineation of the groundwater contamination, a groundwater remedial feasibility study would be conducted and a remediation plan would be prepared and implemented.

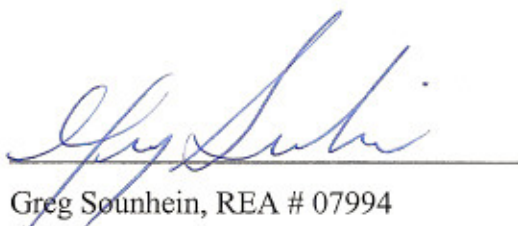
CERIFICATION

This report was prepared under the direct supervision of a California registered geologist at SounPacific. All information provided in this report including statements, conclusions and recommendations are based solely upon field observations and analyses performed by a state-certified laboratory. SounPacific is not responsible for laboratory errors.

SounPacific promises to perform all its work in a manner that is currently used by members in similar professions working in the same geographic area. SounPacific will do what ever is reasonable to ensure that data collection is accurate. Please note however, that rain, buried utilities, and other factors can influence groundwater depths, directions and other factors beyond what SounPacific could reasonably determine.

SounPacific

Prepared by:



Greg Sounhein, REA # 07994

Project Manager



Reviewed by:



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Principal Geologist



Tables

Table 1
Soil Analytical Results
Rohnerville 76
3663 Rohnerville Road
Fortuna, California 95540

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHmo (ppm)	Chromium (ppm)	Lead (ppm)	Zinc (ppm)
Rohnerville-1	R-1 @ 4.5'	12/12/1995	0.2	ND < 0.005	ND < 0.005	0.01	----	----	----	----	----	ND < 1	ND < 5	62	8	36
Rohnerville -2	R-2 @ 4.5'	12/12/1995	ND < 0.2	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----	----	----	ND < 1	ND < 5	55	6	33
SB-1 @ 3'	SB-1	3/8/1997	8.7	ND	0.0051	0.129	0.029	ND	----	----	----	2.2	110	----	6.2	----
SB-1 @ 6.5'	SB-1	3/8/1997	ND	ND	ND	0.072	0.016	ND	----	----	----	ND	11	----	6	----
SB-2 @ 7'	SB-2	3/9/1997	ND	ND	ND	ND	ND	ND	----	----	----	ND	ND	----	3.9	----
SP-1 @ 5'	SP-1	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	ND < 10	----	----	----
SP-1 @ 10'	SP-1	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	ND < 10	----	----	----
SP-2 @ 2.5'	SP-2	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	13	----	----	----
SP-2 @ 5'	SP-2	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	ND < 10	----	----	----
SP-2 @ 9.5'	SP-2	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	ND < 10	----	----	----
SP-3 @ 2.5'	SP-3	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	ND < 10	----	----	----
SP-3 @ 5'	SP-3	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	ND < 10	----	----	----
SP-3 @ 9.5'	SP-3	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	ND < 10	----	----	----
SP-4 @ 2.5'	SP-4	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	11	----	----	----
SP-4 @ 5'	SP-4	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	ND < 10	----	----	----
SP-4 @ 9.5'	SP-4	6/22/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	ND < 10	----	----	----
SB-1 @ 4'	B-1	5/1/2002	ND < 0.060	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-1 @ 8'	B-1	5/1/2002	0.116	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-1 @ 12'	B-1	5/1/2002	ND < 0.060	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-1 @ 16'	B-1	5/1/2002	0.146	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-1 @ 20'	B-1	5/1/2002	ND < 0.060	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-2 @ 4'	B-2	5/1/2002	0.072	ND < 0.005	ND < 0.015	ND < 0.005	0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-2 @ 8'	B-2	5/1/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	0.031	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----

Table 1 (cont.)
Soil Analytical Results
Rohnerville 76
3663 Rohnerville Road
Fortuna, California 95540

Sample ID	Sample Depth	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHmo (ppm)	Chromium (ppm)	Lead (ppm)	Zinc (ppm)
SB-3 @ 4'	4'	B-3	5/1/2002	0.397	ND < 0.005	ND < 0.005	ND < 0.005	0.007	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-3 @ 8'	8'	B-3	5/1/2002	1.68	ND < 0.005	ND < 0.005	0.012	0.025	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-4 @ 4'	4'	B-4	5/1/2002	0.249	ND < 0.005	ND < 0.005	ND < 0.005	0.014	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-4 @ 8'	8'	B-4	5/1/2002	0.189	ND < 0.005	ND < 0.005	ND < 0.005	0.02	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-5 @ 4'	4'	B-5	5/1/2002	10.9	ND < 0.005	0.366	0.146	ND < 0.005	0.089	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-5 @ 8'	8'	B-5	5/1/2002	55.2	1.62	0.238	ND < 0.005	ND < 0.005	4.4	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-6 @ 4'	4'	B-6	5/1/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-6 @ 8'	8'	B-6	5/1/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-7 @ 4'	4'	B-7	5/1/2002	0.144	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-7 @ 8'	8'	B-7	5/1/2002	0.084	ND < 0.005	ND < 0.005	ND < 0.005	0.012	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-8 @ 4'	4'	B-8	5/1/2002	0.754	ND < 0.005	ND < 0.005	ND < 0.005	0.01	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-8 @ 8'	8'	B-8	5/1/2002	0.396	ND < 0.005	0.024	ND < 0.005	0.03	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-9 @ 4'	4'	B-9	5/1/2002	0.637	ND < 0.005	ND < 0.005	ND < 0.005	0.03	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
SB-9 @ 8'	8'	B-9	5/1/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.005	0.011	ND < 0.015	ND < 0.005	ND < 0.005	ND < 5	----	----	----	----	----
RHN76-TPS-1	7'	1	5/25/2004	730	89	ND < 2.0	ND < 2.0	ND < 2.0	ND < 4.0	ND < 2.0	ND < 2.0	ND < 20	110	ND < 10	----	7.0	----
RHN76-TPS-2	7'	2	5/25/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	----	5.3	----
RHN76-TPS-3	7'	3	5/25/2004	ND < 1.0	ND < 0.005	0.005	ND < 0.005	0.033	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	----	6.2	----
RHN76-TPS-4	7'	4	5/25/2004	9.3	ND < 0.025	ND < 0.025	ND < 0.025	ND < 0.025	0.282	ND < 0.025	ND < 0.025	ND < 0.25	18	ND < 10	----	3.6	----
RHN76-TPS-5	7'	5	5/25/2004	4.3	ND < 0.005	ND < 0.005	ND < 0.005	0.012	0.024	ND < 0.005	ND < 0.005	ND < 0.050	9.4	ND < 10	----	6.0	----
RHN76-TPS-6	7'	6	5/25/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	0.010	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.050	1.4	ND < 10	----	6.1	----
RHN76-TPS-8	12'	8	5/25/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	0.013	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.050	1.2	ND < 10	----	5.4	----
RHN76-TPS-9	12'	9	5/25/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.050	ND < 1.0	ND < 10	----	4.5	----
RHN76-TPS-10	12'	10	5/25/2004	930	ND < 0.5	260	2.5	0.6	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	160	57	----	9.3	----

Table 1 (cont.)
Soil Analytical Results
 Rohnerville 76
 3663 Rohnerville Road
 Fortuna, California 95540

Sample ID	Sample Depth	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHmo (ppm)	Chromium (ppm)	Lead (ppm)	Zinc (ppm)
RHN76-TPS-11	12'	TPS-11	5/25/2004	9.4	ND < 0.025	ND < 0.025	ND < 0.025	ND < 0.025	0.42	ND < 0.025	ND < 0.025	ND < 0.25	4.6	ND < 10	----	3.6	----
RHN76-Con 12	3'	Con 12	5/27/2004	ND < 1.0	0.006	0.008	ND < 0.005	0.014	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.05	ND < 1.0	ND < 10	----	6.6	----
RHN76-Con 13	3'	Con 13	5/27/2004	ND < 1.0	0.007	0.012	0.012		ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.05	ND < 1.0	ND < 10	----	6.6	----
RHN76-Con 14	3'	Con 14	5/27/2004	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.05	ND < 1.0	ND < 10	----	4.5	----
RHN76-Con 15	3'	Con 15	5/27/2004	ND < 1.0	0.009	ND < 0.005	ND < 0.005	ND < 0.005	0.006	ND < 0.005	ND < 0.005	ND < 0.05	ND < 1.0	ND < 10	----	4.3	----
RHN76-Con 16	4.5'	Con 16	5/27/2004	23	ND < 0.13	ND < 0.13	ND < 0.13	ND < 0.13	0.87	ND < 0.13	ND < 0.13	ND < 1.3	3.8	ND < 10	----	4.4	----
RHN76-Con 17	4.5'	Con 17	5/27/2004	ND < 1.0	0.010	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.05	ND < 1.0	ND < 10	----	12	----
RHN76-Con 18	4.5'	Con 18	5/27/2004	7,300	5,500	ND < 2.5	4.4	ND < 2.5	17.1	ND < 2.5	ND < 2.5	ND < 25	150	140	----	64	----
RHN76-Con 19	4.5'	Con 19	5/27/2004	15	1.1	ND < 0.13	ND < 0.13	ND < 0.13	0.15	ND < 0.13	ND < 0.13	ND < 1.3	6.5	ND < 10	----	4.8	----
RHN76-Con 20	3'	Con 20	5/27/2004	2,900	900	ND < 2.5	ND < 2.5	ND < 2.5	5.2	ND < 2.5	ND < 2.5	ND < 25	210	210	----	26	----
RHN76-Con 21	3'	Con 21	5/27/2004	1,200	550	ND < 0.5	1.2	ND < 0.5	6.4	ND < 0.5	ND < 0.5	ND < 5.0	69	100	----	12	----
RHN76-TPS22	15'	22	6/1/2004	2,700	1,000	ND < 1.0	1.4	ND < 1.0	5.1	ND < 1.0	ND < 1.0	ND < 10	180	60	----	4.5	----
RHN76-TPS23	9'	23	6/1/2004	ND < 0.5	0.035	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.05	ND < 1.0	ND < 10	----	3.4	----
RHN76-TPS24	9'	24	6/1/2004	ND < 0.5	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	0.07	ND < 1.0	13	----	4.4	----
RHN76-TPS25	9'	25	6/1/2004	ND < 0.5	0.039	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.05	ND < 1.0	ND < 10	----	15	----
RHN76-TPS26	9'	26	6/1/2004	5,000	1,400	ND < 1.0	1.6	ND < 1.0	6.2	ND < 1.0	ND < 1.0	ND < 10	290	60	----	15	----
RHN76-TPS27	9'	27	6/1/2004	5,800	1,800	ND < 1.0	1.9	ND < 1.0	7.3	ND < 1.0	ND < 1.0	ND < 10	400	420	----	29	----
RHN76-TPS28	9'	28	6/1/2004	ND < 0.5	0.071	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.05	1.3	20	----	4.5	----
RHN76-TPS29	9'	29	6/1/2004	0.7	0.400	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.05	ND < 1.0	13	----	6.1	----
RHN76-TPS30	15'	30	6/1/2004	1.5	0.340	ND < 0.005	0.020	ND < 0.005	0.010	ND < 0.005	ND < 0.005	ND < 0.05	3.3	15	----	7.4	----
RHN76-TPS31	15'	31	6/1/2004	ND < 0.5	0.048	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.010	ND < 0.005	ND < 0.005	ND < 0.05	22	ND < 10	----	2.8	----

Table 1 (cont.)
Soil Analytical Results
Rohnerville 76
3663 Rohnerville Road
Fortuna, California 95540

Sample ID	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHmo (ppm)	Chromium (ppm)	Lead (ppm)	Zinc (ppm)
1 @ 6'	9/26/2005	0.25	ND < 0.0050	0.0083	0.0076	ND < 0.0050	0.0139	ND < 0.0050	ND < 0.0050	ND < 0.0500	ND < 10	ND < 10	----	----	----
2 @ 13'	9/26/2005	ND < 0.0600	ND < 0.0050	0.0080	ND < 0.0050	ND < 0.0050	0.0121	ND < 0.0050	ND < 0.0050	ND < 0.0500	ND < 10	ND < 10	----	----	----
3 @ 6'	9/26/2005	0.165	0.0093	0.0068	ND < 0.0050	0.0061	0.0094	ND < 0.0050	ND < 0.0050	0.0583	ND < 10	ND < 10	----	----	----
4 @ 6'	9/26/2005	0.169	ND < 0.0050	0.0233	0.0104	ND < 0.0050	0.0303	ND < 0.0050	ND < 0.0050	ND < 0.0500	ND < 10	ND < 10	----	----	----
5 @ 13'	9/26/2005	615	0.814	6.24	37.1	14.7	ND < 0.500	ND < 0.500	ND < 0.500	ND < 5.00	21	ND < 10	----	----	----
6 @ 13'	9/27/2005	159	ND < 0.500	0.682	4.60	2.86	ND < 0.500	ND < 0.500	ND < 0.500	ND < 5.00	ND < 10	ND < 10	----	----	----
7 @ 6'	9/27/2005	566	ND < 2.50	24.0	74.0	11.8	5.14	ND < 2.50	ND < 2.50	ND < 25.0	275	80	----	----	----
8 @ 12'	9/28/2005	177	ND < 0.500	6.16	23.8	3.67	2.65	ND < 0.500	ND < 0.500	ND < 5.00	29	16	----	----	----
9 @ 6'	9/27/2005	0.0879	ND < 0.0050	0.0231	0.0087	ND < 0.0050	0.0386	ND < 0.0050	ND < 0.0050	ND < 0.0500	ND < 10	ND < 10	----	----	----
10 @ 12'	9/27/2005	402	ND < 0.500	1.14	18.9	7.13	ND < 0.500	ND < 0.500	ND < 0.500	ND < 5.00	ND < 30	ND < 30	----	----	----
11 @ 15'	9/27/2005	296	0.512	1.18	7.65	5.72	ND < 0.500	ND < 0.500	ND < 0.500	ND < 5.00	16	ND < 10	----	----	----
12 @ 16.5'	9/28/2005	40.3	ND < 0.500	3.89	4.25	0.724	3.22	ND < 0.500	ND < 0.500	ND < 5.00	27	16	----	----	----
13 @ 6'	9/28/2005	ND < 0.0600	ND < 0.0050	ND < 0.005	ND < 0.0050	ND < 0.0050	0.0106	ND < 0.0050	ND < 0.0050	ND < 0.0500	ND < 10	12	----	----	----
14 @ 13'	9/28/2005	17.4	ND < 0.500	4.01	2.97	0.536	5.02	0.584	ND < 0.500	ND < 5.00	148	54	----	----	----
15 @ 15'	9/28/2005	14.3	ND < 0.500	2.45	3.25	0.514	2.06	ND < 0.500	ND < 0.500	ND < 5.00	ND < 10	ND < 10	----	----	----
16 @ 6'	9/28/2005	157	ND < 0.500	4.37	27.9	3.98	2.38	ND < 0.500	ND < 0.500	ND < 5.00	68	28	----	----	----
17 @ 15'	9/28/2005	2.35	ND < 0.0250	0.392	0.533	0.0869	0.426	0.0461	ND < 0.0250	ND < 0.250	ND < 10	ND < 10	----	----	----
18 @ 13'	9/29/2005	ND < 0.0600	ND < 0.500	0.990	1.03	ND < 0.500	1.03	ND < 0.500	ND < 0.500	ND < 5.00	ND < 10	ND < 10	----	----	----
19 @ 6'	9/29/2005	0.149	ND < 0.0050	0.0342	0.0228	ND < 0.0050	0.0520	0.0062	ND < 0.0050	ND < 0.0500	ND < 10	13	----	----	----
20 @ 13'	9/29/2005	16.7	ND < 0.500	2.75	2.76	0.546	3.91	ND < 0.500	ND < 0.500	ND < 5.00	ND < 10	ND < 10	----	----	----
21 @ 6'	9/29/2005	0.65	0.0532	0.0197	0.0447	0.0327	0.0123	ND < 0.0050	ND < 0.0050	ND < 0.0500	ND < 10	ND < 10	----	----	----
22 @ 14'	9/29/2005	ND < 0.0600	ND < 0.0050	ND < 0.005	ND < 0.0050	ND < 0.0050	0.0069	ND < 0.0050	ND < 0.0050	ND < 0.0500	ND < 10	ND < 10	----	----	----

Table 2
Groundwater Analytical Results
Rohnerville 76
3663 Rohnerville Road
Fortuna, California 95540

Sample ID	Sample Location	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	TAME (ppb)	TPHd (ppb)	TPHmo (ppb)	Halogenated HCs (ppb)	Cadmium (ppb)	Chromium (ppb)	Lead (ppb)	Zinc (ppb)	TOG (ppb)
Rohnerville-Water	R-W	12/12/1995	3,000	10	ND < 5	50	20	----	----	ND < 50	3,100	31	12	1,100	2,200	27,000	----
GW-1	SB-1	3/9/1997	100	ND	0.63	6.4	2	ND	----	ND	ND	----	----	----	21	----	ND
GW-2	SB-2	3/9/1997	ND	ND	ND	ND	ND	ND	----	ND	ND	----	----	----	ND	----	ND
RHN76 GW B1 @ 10'	SP-1	6/22/2000	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	2.9	----	----	1,400	----	----	----	----	----	10
SP-RN76-GW-2	SP-5	7/19/2000	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 0.5	ND < 1.0	ND < 50	----	----	----	----	----	----	----
GWSB-1 @ 20'	SB-1	5/1/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	ND < 2.0	ND < 0.5	ND < 50	ND < 50	----	----	----	----	----	----
GWSB-2 @ 8'	SB-2	5/1/2002	ND < 50	1.2	0.56	ND < 0.6	ND < 0.3	60.3	ND < 0.5	ND < 50	ND < 50	----	----	----	----	----	----
GWSB-3 @ 8'	SB-3	5/1/2002	497	44.2	0.6	1.1	9.7	207	ND < 0.5	102	592	----	----	----	----	----	----
GWSB-4 @ 8'	SB-4	5/1/2002	677	273	1.0	ND < 0.6	23.9	105	ND < 0.5	ND < 50	6,660	----	----	----	----	----	----
GWSB-5 @ 8'	SB-5	5/1/2002	ND < 50	1.56	ND < 0.3	1.0	3.8	2.67	ND < 0.5	181	4,850	----	----	----	----	----	----
GWSB-6 @ 8'	SB-6	5/1/2002	32,200	2,340	782	2,800	1,210	ND < 2,000	ND < 500	5,270	ND < 50	----	----	----	----	----	----
GWSB-7 @ 8'	SB-7	5/1/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	ND < 2.0	ND < 0.5	ND < 50	ND < 50	----	----	----	----	----	----
GWSB-8 @ 8'	SB-8	5/1/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	4.3	ND < 0.5	ND < 50	673	----	----	----	----	----	----
GWSB-9 @ 8'	SB-9	5/1/2002	ND < 50	1.0	0.3	ND < 0.6	0.4	24.1	ND < 0.5	ND < 50	ND < 50	----	----	----	----	----	----
RHN76-TPGW-7	7GW	5/25/2004	500,000	630	12,000	91,000	9,800	2,800	ND < 500	390,000	5,400	----	----	----	450	----	----
WT @ 12.5'	Excavation Pit	9/28/2005	34,700	564	7,320	9,240	1,840	2,060	325	3,660	1,140	----	----	----	----	----	----

notes:

TPHg: Total petroleum hydrocarbons as gasoline

MTBE: Methyl tertiary butyl ether

EDB: 1,2-Dibromoethane

TAME: Tertiary amyl methyl ether

ppb: parts per billion = $\mu\text{g/l} = .001 \text{ mg/l} = 0.001 \text{ ppm}$.

Laboratory analytical results for DIPE, ETBE, TBA, Methanol, Ethanol, EDB, EDC, and Creosote were removed from this table to save space.

These constituents were never reported at or above the laboratory detection limits.

TBA: Tertiary butanol

DIPE: Diisopropyl ether

ETBE: Ethyl tertiary butyl ether

EDC: 1,2-Dichloroethane

ND: Not detected. Sample was detected at or below the method detection limit as shown.

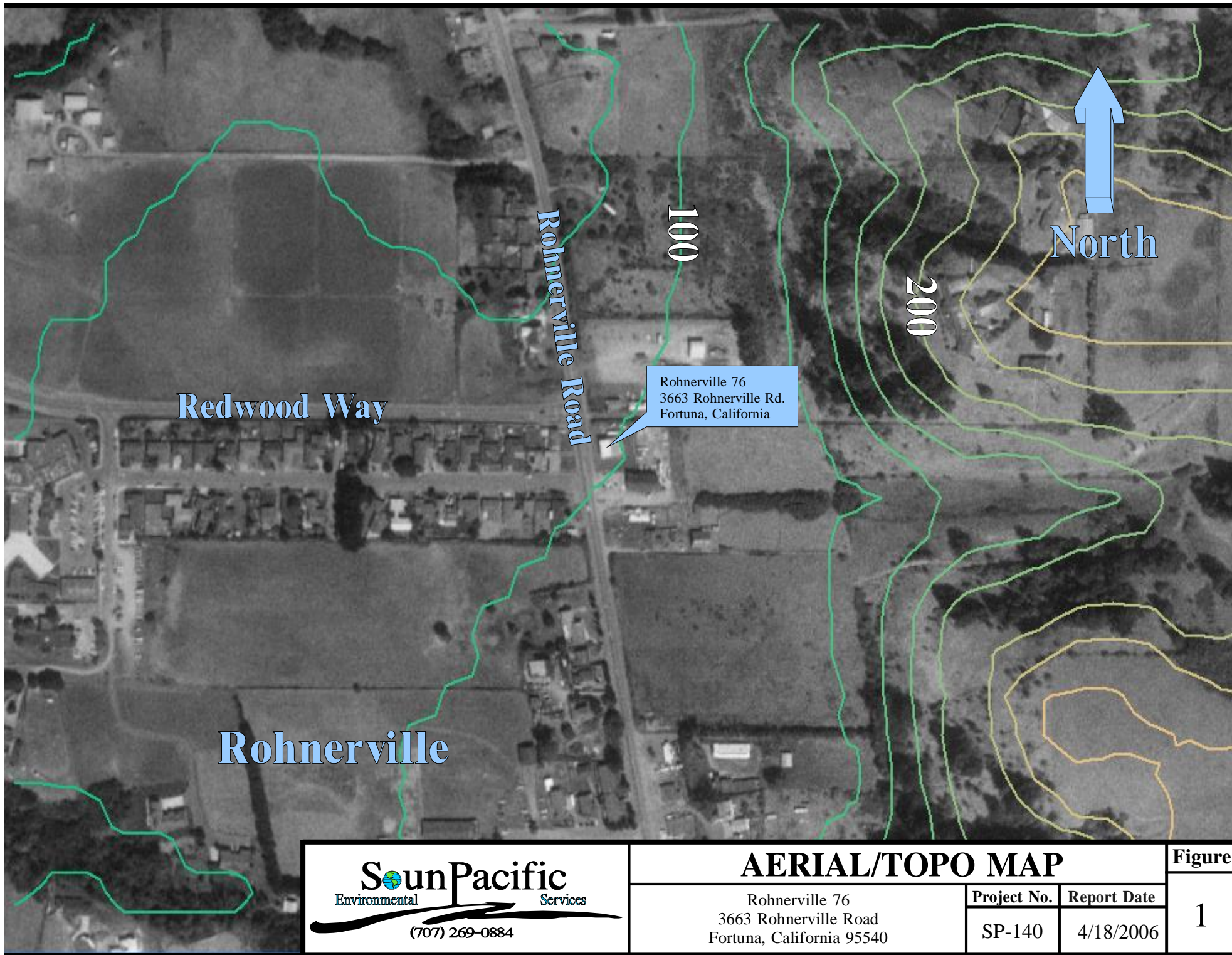
TPHd: Total petroleum hydrocarbons as diesel

TPHmo: Total petroleum hydrocarbons as motor oil

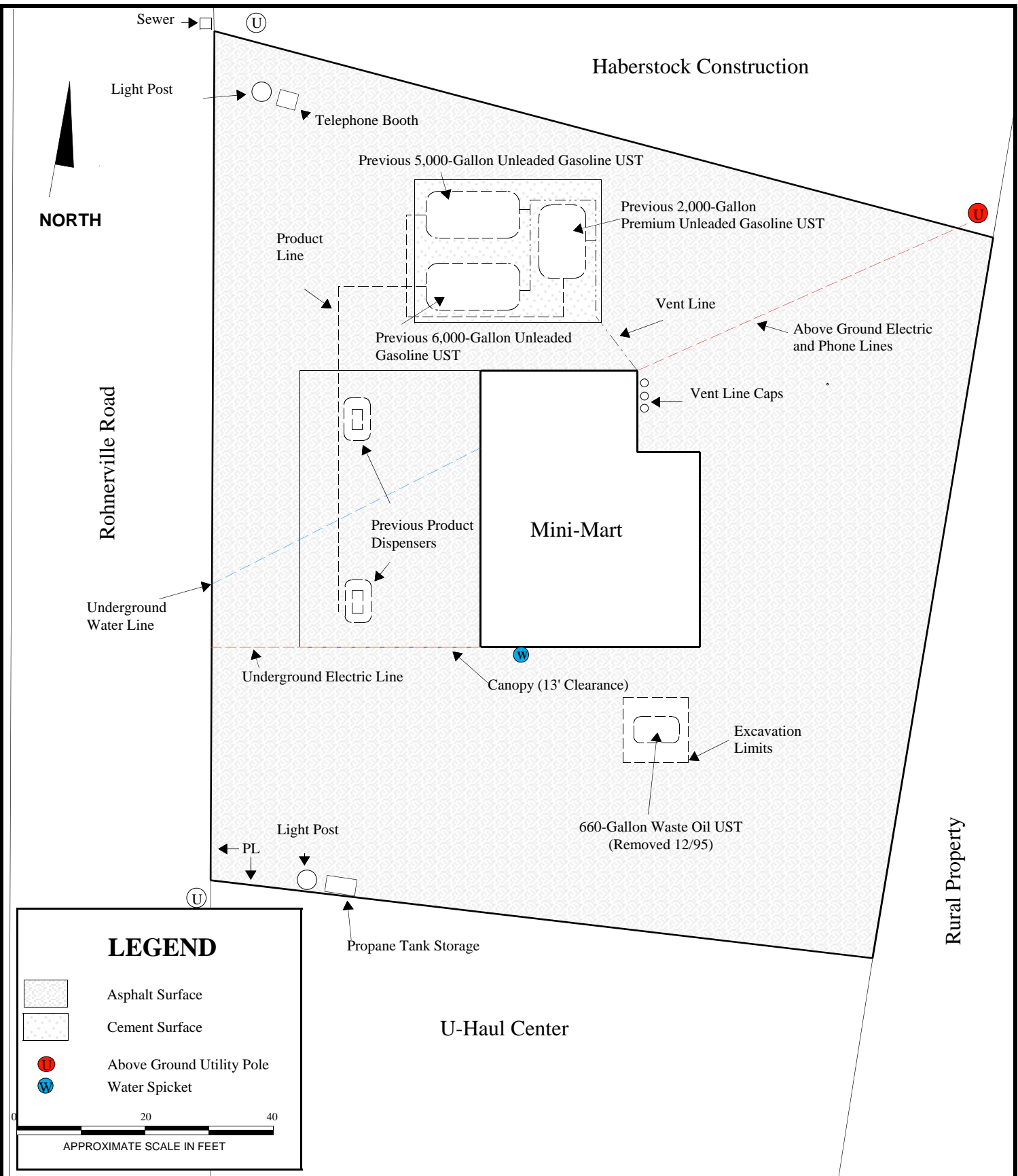
HC's: Hydrocarbons

TOG: Total oil and grease

Figures



 SounPacific Environmental Services (707) 269-0884	AERIAL/TOPO MAP			Figure
	Rohnerville 76 3663 Rohnerville Road Fortuna, California 95540	Project No.	Report Date	1
		SP-140	4/18/2006	



SITE PLAN

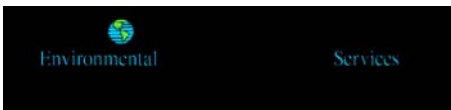
Figure

2

Rohnerville 76
3663 Rohnerville Road
Fortuna, California 95540

Project No.
SP-140

Report Date
4/18/2006



NORTH

Rohnerville Road

LEGEND



Previously Removed Waste-Oil UST

R-1

Soil Sample (12/95)

R-W

Groundwater Sample (12/95)

SB-1

Previously Drilled Soil Boring (3/97)

SB-1

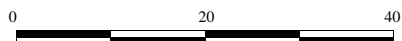
Previously Drilled Soil Boring (6/00)

SP-1

Groundwater Sample Collected (7/00)

B-1

Previously Drilled Soil Boring (5/02)



APPROXIMATE SCALE IN FEET

PREVIOUS INVESTIGATIONS

Rohnerville 76
3663 Rohnerville Road
Fortuna, California 95540

Project No.

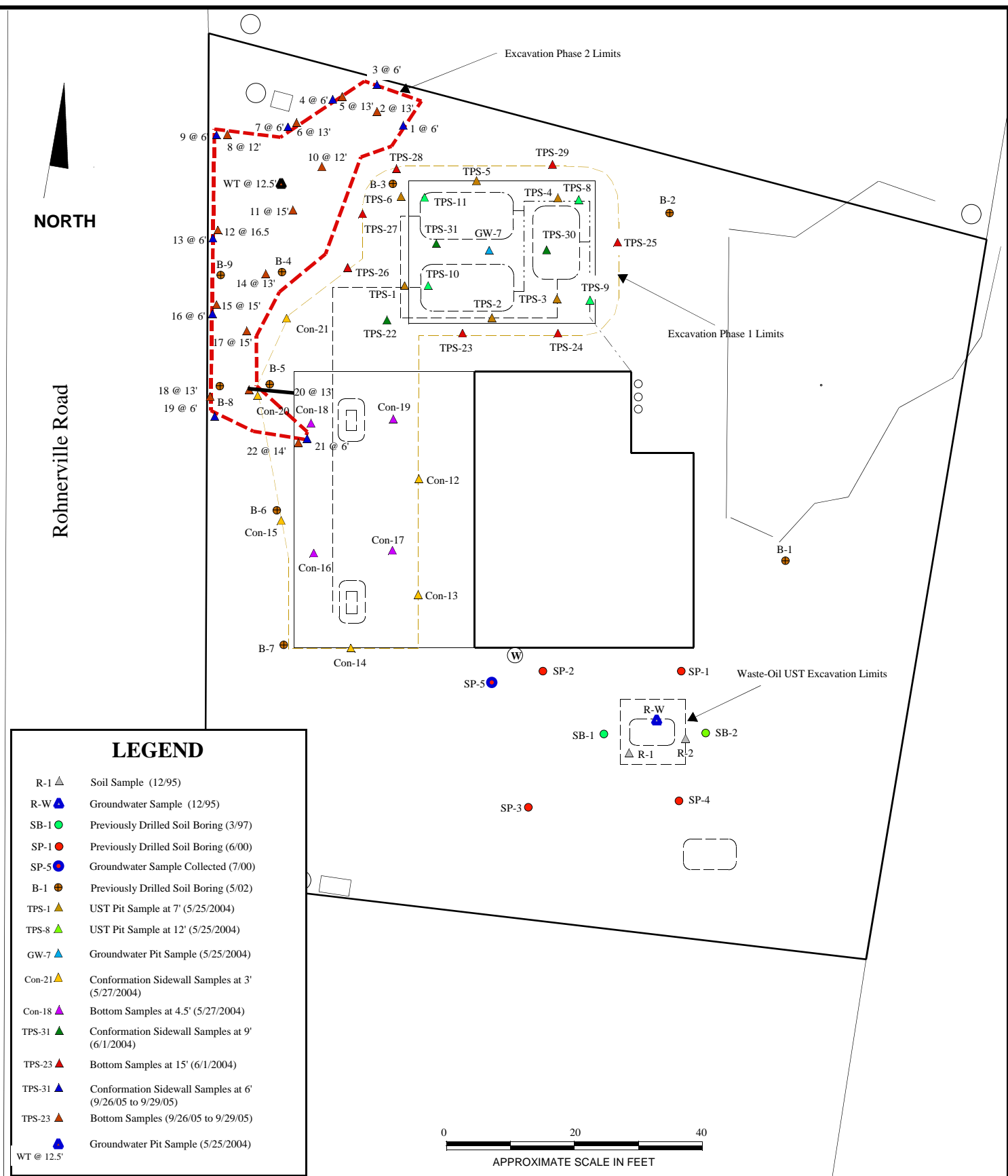
SP-140

Report Date

4/18/2006

Figure

3



Soil Excavation Limits & Sample Locations

Figure

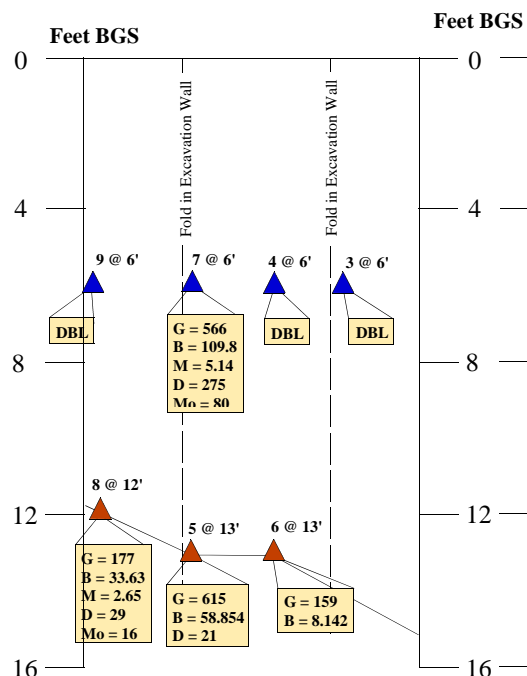


Rohnerville 76
 3663 Rohnerville Road
 Fortuna, California 95540

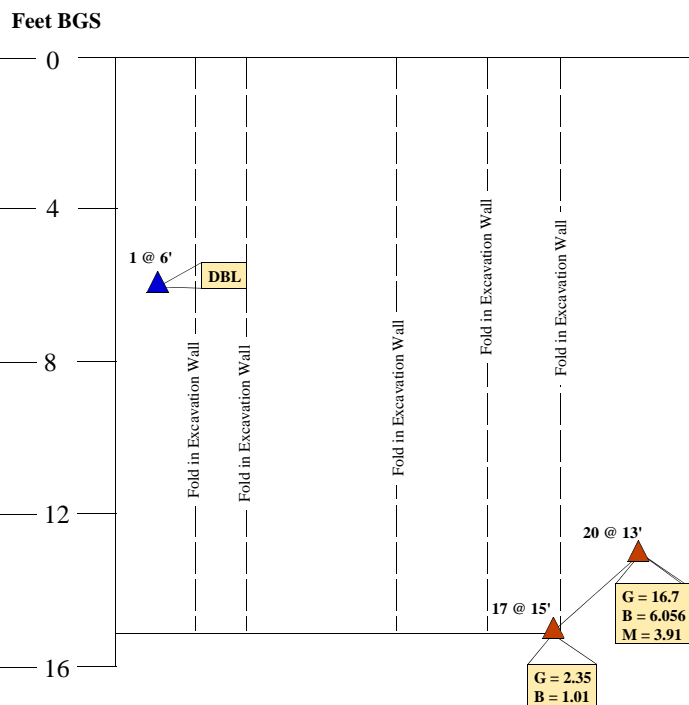
Project No.
 SP-140

Report Date
 4/18/06

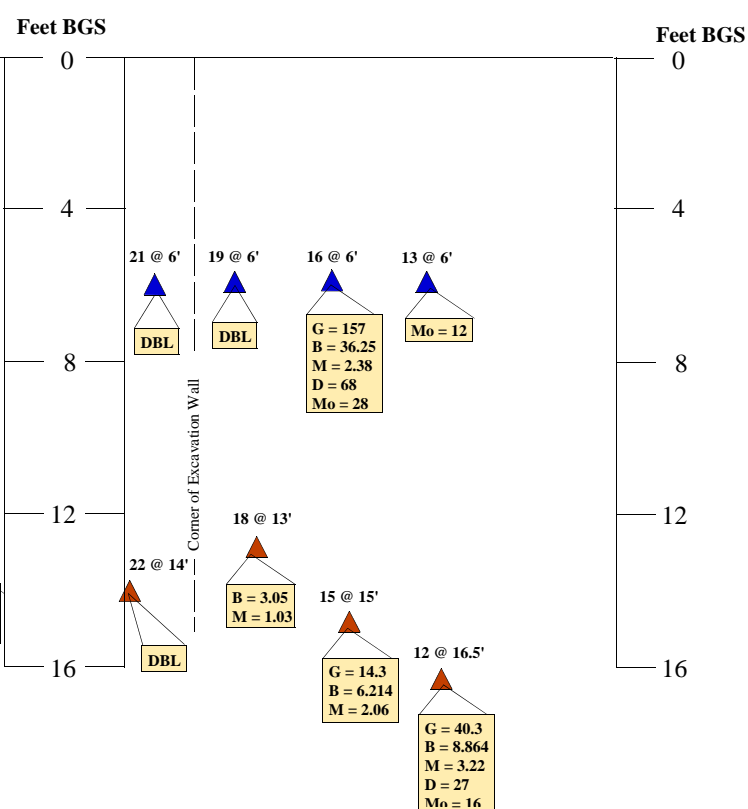
Northern Wall



Eastern Wall



Southern-Western Wall



VS: 1" = 5'

LEGEND

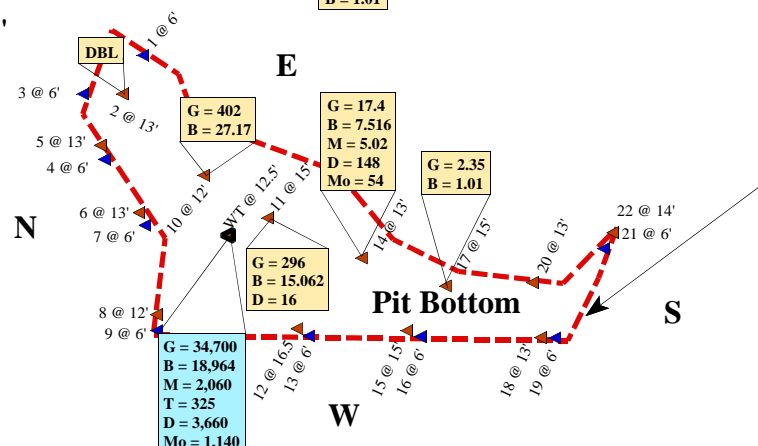
- ▲ Soil Sample Collected from Sidewall
- ▲ Soil Sample Collected Excavation Bottom

Groundwater Analytical Results/ppb

Soil Analytical Results/ppm

G = TPHg DBL = Detected below 1 ppm
B = BTXE
M = MTBE DBL = Detected below 1 ppb

0 20 40
APPROXIMATE SCALE IN FEET



Overhead View of Excavation Limits

Note:

Excavation actual sloped down to 21 feet BGS but due to quickly collapsing sidewalls from water intrusion, we could only collect samples above the water table as shown.

EXCAVATION SIDEWALLS AND PLAN VIEW



Humboldt Hill Shell
5785 South Broadway
Eureka, California 95503

Project No.
SP-140

Report Date
4/18/2006

Figure

5

Appendices

Appendix A



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fax 530.243.7494 Redding, California 96001

October 24, 2005

Lab ID: 5100159

Greg Sounhein
SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549
RE: ROHNERVILLE 76 SP-140

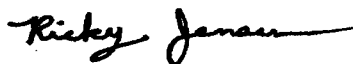
Dear Greg Sounhein,

Enclosed are the analysis results for Work Order number 5100159. All analysis were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,


For



Ricky D. Jensen
Laboratory Director
California ELAP Certification Number 1677



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voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein
Project: ROHNERVILLE 76 SP-140

Description: 1@6'

Matrix: Soil

Lab ID: 5100159-01

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/26/05 00:00


Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Gasoline	mg/kg	0.250			0.0600	EPA 8015/8260	10/06/05	10/05/05	B5J0100
Benzene	"	ND			0.0050	"	"	"	"
Toluene	"	0.0083			0.0050	"	"	"	"
Ethylbenzene	"	ND			0.0050	"	"	"	"
Xylenes (total)	"	0.0076			0.0050	"	"	"	"
Methyl tert-butyl ether	"	0.0139			0.0050	"	"	"	"
Di-isopropyl ether	"	ND			0.0050	"	"	"	"
Tert-amyl methyl ether	"	ND			0.0050	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.0050	"	"	"	"
Tert-butyl alcohol	"	ND			0.0500	"	"	"	"
Surrogate: 4-Bromofluorobenzene		90.0 %		39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Diesel	mg/kg	ND	QM-07		10	EPA 8015 MOD	10/11/05	10/07/05	B5J0168
Motor Oil	"	ND			10	"	"	"	"
Surrogate: Octacosane		82.0 %		50-150		"	"	"	"



Approved By

Basic Laboratory, Inc.

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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein
Project: ROHNERVILLE 76 SP-140

Description: 2@13'

Matrix: Soil

Lab ID: 5100159-02

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/26/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	ND			0.0600	EPA 8015/8260	10/05/05	10/05/05	B5J0100
Benzene	"	ND			0.0050	"	"	"	"
Toluene	"	0.0080			0.0050	"	"	"	"
Ethylbenzene	"	ND			0.0050	"	"	"	"
Xylenes (total)	"	ND			0.0050	"	"	"	"
Methyl tert-butyl ether	"	0.0121			0.0050	"	"	"	"
Di-isopropyl ether	"	ND			0.0050	"	"	"	"
Tert-amyl methyl ether	"	ND			0.0050	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.0050	"	"	"	"
Tert-butyl alcohol	"	ND			0.0500	"	"	"	"
Surrogate: 4-Bromofluorobenzene		89.6 %			39-128	"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-07		10	EPA 8015 MOD	10/11/05	10/07/05	B5J0168
Motor Oil	"	ND			10	"	"	"	"
Surrogate: Octacosane		79.0 %			50-150	"	"	"	"


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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 3@6'

Matrix: Soil

Lab ID: 5100159-03

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/26/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	0.165			0.0600	EPA 8015/8260	10/05/05	10/05/05	B5J0100
Benzene	"	0.0093			0.0050	"	"	"	"
Toluene	"	0.0068			0.0050	"	"	"	"
Ethylbenzene	"	0.0061			0.0050	"	"	"	"
Xylenes (total)	"	ND			0.0050	"	"	"	"
Methyl tert-butyl ether	"	0.0094			0.0050	"	"	"	"
Di-isopropyl ether	"	ND			0.0050	"	"	"	"
Tert-amyl methyl ether	"	ND			0.0050	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.0050	"	"	"	"
Tert-butyl alcohol	"	0.0583			0.0500	"	"	"	"
Surrogate: 4-Bromofluorobenzene		89.8 %		39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-07		10	EPA 8015 MOD	10/11/05	10/07/05	B5J0168
Motor Oil	"	ND			10	"	"	"	"
Surrogate: Octacosane		88.3 %		50-150		"	"	"	"


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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein
Project: ROHNERVILLE 76 SP-140

Description: 4@6'

Matrix: Soil

Lab ID: 5100159-04

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/26/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	0.169			0.0600	EPA 8015/8260	10/05/05	10/05/05	B5J0100
Benzene	"	ND			0.0050	"	"	"	"
Toluene	"	0.0233			0.0050	"	"	"	"
Ethylbenzene	"	ND			0.0050	"	"	"	"
Xylenes (total)	"	0.0104			0.0050	"	"	"	"
Methyl tert-butyl ether	"	0.0303			0.0050	"	"	"	"
Di-isopropyl ether	"	ND			0.0050	"	"	"	"
Tert-amyl methyl ether	"	ND			0.0050	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.0050	"	"	"	"
Tert-butyl alcohol	"	ND			0.0500	"	"	"	"
Surrogate: 4-Bromofluorobenzene		92.2 %		39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-07		10	EPA 8015 MOD	10/12/05	10/07/05	B5J0168
Motor Oil	"	ND			10	"	"	"	"
Surrogate: Octacosane		96.1 %		50-150		"	"	"	"



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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein
Project: ROHNERVILLE 76 SP-140

Description: 5@13'

Matrix: Soil

Lab ID: 5100159-05

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/26/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	615	R-07		6.00	EPA 8015/8260	10/05/05	10/05/05	B5J0101
Benzene	"	0.814	R-07		0.500	"	"	"	"
Toluene	"	6.24	R-07		0.500	"	"	"	"
Ethylbenzene	"	14.7	R-07		0.500	"	"	"	"
Xylenes (total)	"	37.1	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		97.0 %	R-07	39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	21	D-08, QM-07		10	EPA 8015 MOD	10/11/05	10/07/05	B5J0168
Motor Oil	"	ND			10	"	"	"	"
Surrogate: Octacosane		102 %		50-150		"	"	"	"



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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 6@13'

Matrix: Soil

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Lab ID: 5100159-06

Sampled: 09/27/05 00:00


Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	159	R-07		6.00	EPA 8015/8260	10/06/05	10/05/05	B5J0101
Benzene	"	ND	R-07		0.500	"	"	"	"
Toluene	"	0.682	R-07		0.500	"	"	"	"
Ethylbenzene	"	2.86	R-07		0.500	"	"	"	"
Xylenes (total)	"	4.60	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		81.6 %	R-07	39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-07		10	EPA 8015 MOD	10/12/05	10/07/05	B5J0168
Motor Oil	"	ND			10	"	"	"	"
Surrogate: Octacosane		105 %		50-150		"	"	"	"



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fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 7@6'

Matrix: Soil

Lab ID: 5100159-07

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/27/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	566	R-07		30.0	EPA 8015/8260	10/05/05	10/05/05	B5J0101
Benzene	"	ND	R-07		2.50	"	"	"	"
Toluene	"	24.0	R-07		2.50	"	"	"	"
Ethylbenzene	"	11.8	R-07		2.50	"	"	"	"
Xylenes (total)	"	74.0	R-07		2.50	"	"	"	"
Methyl tert-butyl ether	"	5.14	R-07		2.50	"	"	"	"
Di-isopropyl ether	"	ND	R-07		2.50	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		2.50	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		2.50	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		25.0	"	"	"	"
Surrogate: 4-Bromofluorobenzene		96.0 %		39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	275	QM-07		40	EPA 8015 MOD	10/13/05	10/07/05	B5J0168
Motor Oil	"	80	D-10		40	"	"	"	"
Surrogate: Octacosane		185 %	S-07	50-150		"	"	"	"


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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 9@6'

Matrix: Soil

Lab ID: 5100159-08

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/27/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	0.0879			0.0600	EPA 8015/8260	10/05/05	10/05/05	B5J0100
Benzene	"	ND			0.0050	"	"	"	"
Toluene	"	0.0231			0.0050	"	"	"	"
Ethylbenzene	"	ND			0.0050	"	"	"	"
Xylenes (total)	"	0.0087			0.0050	"	"	"	"
Methyl tert-butyl ether	"	0.0386			0.0050	"	"	"	"
Di-isopropyl ether	"	ND			0.0050	"	"	"	"
Tert-amyl methyl ether	"	ND			0.0050	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.0050	"	"	"	"
Tert-butyl alcohol	"	ND			0.0500	"	"	"	"
Surrogate: 4-Bromofluorobenzene		91.0 %		39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-07		10	EPA 8015 MOD	10/12/05	10/07/05	B5J0168
Motor Oil	"	ND			10	"	"	"	"
Surrogate: Octacosane		86.8 %		50-150		"	"	"	"


Approved By

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California D.O.H.S. Cert #1677



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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 10@12'

Matrix: Soil

Lab ID: 5100159-09

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/27/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	402	R-07		6.00	EPA 8015/8260	10/06/05	10/05/05	B5J0101
Benzene	"	ND	R-07		0.500	"	"	"	"
Toluene	"	1.14	R-07		0.500	"	"	"	"
Ethylbenzene	"	7.13	R-07		0.500	"	"	"	"
Xylenes (total)	"	18.9	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		82.0 %	R-07		39-128	"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-07, R-08		30	EPA 8015 MOD	10/12/05	10/07/05	B5J0168
Motor Oil	"	ND	R-08		30	"	"	"	"
Surrogate: Octacosane		67.4 %			50-150	"	"	"	"



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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 11@15'

Matrix: Soil

Lab ID: 5100159-10

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/27/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	296	R-07		6.00	EPA 8015/8260	10/06/05	10/05/05	B5J0101
Benzene	"	0.512	R-07		0.500	"	"	"	"
Toluene	"	1.18	R-07		0.500	"	"	"	"
Ethylbenzene	"	5.72	R-07		0.500	"	"	"	"
Xylenes (total)	"	7.65	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		84.0 %	R-07		39-128	"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	16	D-08, QM-07		10	EPA 8015 MOD	10/12/05	10/07/05	B5J0168
Motor Oil	"	ND			10	"	"	"	"
Surrogate: Octacosane		77.2 %			50-150	"	"	"	"



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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 8@12'

Matrix: Soil

Lab ID: 5100159-11

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/28/05 00:00


Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	177	R-07		6.00	EPA 8015/8260	10/05/05	10/05/05	B5J0101
Benzene	"	ND	R-07		0.500	"	"	"	"
Toluene	"	6.16	R-07		0.500	"	"	"	"
Ethylbenzene	"	3.67	R-07		0.500	"	"	"	"
Xylenes (total)	"	23.8	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	2.65	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		80.8 %	R-07		39-128	"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	29	D-25, QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	16	D-10, QM-06		10	"	"	"	"
Surrogate: Octacosane		95.5 %			50-150	"	"	"	"


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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 12@16.5'

Matrix: Soil

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Lab ID: 5100159-12

Sampled: 09/28/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	40.3	R-07		6.00	EPA 8015/8260	10/05/05	10/05/05	B5J0101
Benzene	"	ND	R-07		0.500	"	"	"	"
Toluene	"	3.89	R-07		0.500	"	"	"	"
Ethylbenzene	"	0.724	R-07		0.500	"	"	"	"
Xylenes (total)	"	4.25	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	3.22	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		75.4 %	R-07		39-128	"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	27	D-25, QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	16	D-10, QM-06		10	"	"	"	"
Surrogate: Octacosane		92.5 %			50-150	"	"	"	"


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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 13@6'

Matrix: Soil

Lab ID: 5100159-13

Lab No: 5100159
Reported: 10/25/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/28/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	ND			0.0600	EPA 8015/8260	10/05/05	10/05/05	B5J0100
Benzene	"	ND			0.0050	"	"	"	"
Toluene	"	ND			0.0050	"	"	"	"
Ethylbenzene	"	ND			0.0050	"	"	"	"
Xylenes (total)	"	ND			0.0050	"	"	"	"
Methyl tert-butyl ether	"	0.0106			0.0050	"	"	"	"
Di-isopropyl ether	"	ND			0.0050	"	"	"	"
Tert-amyl methyl ether	"	ND			0.0050	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.0050	"	"	"	"
Tert-butyl alcohol	"	ND			0.0500	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>91.2 %</i>		<i>39-128</i>		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-06		10	EPA 8015 MOD	10/20/05	10/11/05	B5J0212
Motor Oil	"	12	D-06, QM-06		10	"	"	"	"
<i>Surrogate: Octacosane</i>		<i>97.6 %</i>		<i>50-150</i>		"	"	"	"


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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 14@13'

Matrix: Soil

Lab ID: 5100159-14

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/28/05 00:00

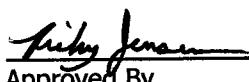
Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	17.4	R-07		6.00	EPA 8015/8260	10/05/05	10/05/05	B5J0101
Benzene	"	ND	R-07		0.500	"	"	"	"
Toluene	"	4.01	R-07		0.500	"	"	"	"
Ethylbenzene	"	0.536	R-07		0.500	"	"	"	"
Xylenes (total)	"	2.97	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	5.02	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	0.584	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		78.6 %	R-07	39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	148	D-25, QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	54	QM-06, D-10		10	"	"	"	"
Surrogate: Octacosane		99.4 %		50-150		"	"	"	"


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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 15@15'

Matrix: Soil

Lab ID: 5100159-15

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/28/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	14.3	R-07		6.00	EPA 8015/8260	10/05/05	10/05/05	B5J0101
Benzene	"	ND	R-07		0.500	"	"	"	"
Toluene	"	2.45	R-07		0.500	"	"	"	"
Ethylbenzene	"	0.514	R-07		0.500	"	"	"	"
Xylenes (total)	"	3.25	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	2.06	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		77.2 %	R-07	39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	ND	QM-06		10	"	"	"	"
Surrogate: Octacosane		106 %		50-150		"	"	"	"


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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 16@6'

Matrix: Soil

Lab ID: 5100159-16

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/28/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	157	R-07		6.00	EPA 8015/8260	10/05/05	10/05/05	B5J0101
Benzene	"	ND	R-07		0.500	"	"	"	"
Toluene	"	4.37	R-07		0.500	"	"	"	"
Ethylbenzene	"	3.98	R-07		0.500	"	"	"	"
Xylenes (total)	"	27.9	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	2.38	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		86.6 %	R-07	39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	68	D-25, QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	28	D-10, QM-06		10	"	"	"	"
Surrogate: Octacosane		99.1 %		50-150		"	"	"	"


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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein
Project: ROHNERVILLE 76 SP-140

Description: 17@15'

Matrix: Soil

Lab ID: 5100159-17

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/28/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Gasoline	mg/kg	2.35	R-07		0.300	EPA 8015/8260	10/06/05	10/06/05	B5J0100
Benzene	"	ND	R-07		0.0250	"	"	"	"
Toluene	"	0.392	R-07		0.0250	"	"	"	"
Ethylbenzene	"	0.0869	R-07		0.0250	"	"	"	"
Xylenes (total)	"	0.533	R-07		0.0250	"	"	"	"
Methyl tert-butyl ether	"	0.426	R-07		0.0250	"	"	"	"
DI-isopropyl ether	"	ND	R-07		0.0250	"	"	"	"
Tert-amyl methyl ether	"	0.0461	R-07		0.0250	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.0250	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		0.250	"	"	"	"
Surrogate: 4-Bromofluorobenzene		88.8 %		39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Diesel	mg/kg	ND	QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	ND	QM-06		10	"	"	"	"
Surrogate: Octacosane		91.6 %		50-150		"	"	"	"



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Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: WT@12.5'

Matrix: Water

Lab ID: 5100159-18

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/28/05 00:00

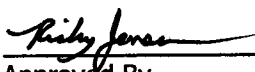
Received: 10/05/05 11:22

Volatile Organic Compounds

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Gasoline	ug/l	34700	R-07		5000	EPA 8015/8260	10/06/05	10/06/05	B5J0121
Benzene	"	564	R-07		50.0	"	"	"	"
Toluene	"	7320	R-07		250	"	"	"	"
Ethylbenzene	"	1840	R-07		50.0	"	"	"	"
Xylenes (total)	"	9240	R-07		100	"	"	"	"
Methyl tert-butyl ether	"	2060	R-07		100	"	"	"	"
Di-isopropyl ether	"	ND	R-07		50.0	"	"	"	"
Tert-amyl methyl ether	"	325	R-07		50.0	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		50.0	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5000	"	"	"	"
Surrogate: 4-Bromofluorobenzene		89.4 %		43-155		"	"	"	"

TPH Diesel & Motor Oil

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Diesel	ug/l	3660	D-08, I-03		100	EPA 8015 MOD	10/13/05	10/06/05	B5J0117
Motor Oil	"	1140	D-02, I-03		100	"	"	"	"
Surrogate: Octacosane		98.0 %	I-03	50-150		"	"	"	"



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fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 18@13'

Matrix: Soil

Lab ID: 5100159-19

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/29/05 00:00


Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Gasoline	mg/kg	ND	R-07		6.00	EPA 8015/8260	10/06/05	10/05/05	B5J0101
Benzene	"	ND	R-07		0.500	"	"	"	"
Toluene	"	0.990	R-07		0.500	"	"	"	"
Ethylbenzene	"	ND	R-07		0.500	"	"	"	"
Xylenes (total)	"	1.03	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	1.03	R-07		0.500	"	"	"	"
Di-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		76.4 %	R-07	39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Diesel	mg/kg	ND	QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	ND	QM-06		10	"	"	"	"
Surrogate: Octacosane		83.5 %		50-150		"	"	"	"


Approved By
Basic Laboratory, Inc.
California D.O.H.S. Cert #1677



basic
laboratory

www.basiclab.com

voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 19@6'

Matrix: Soil

Lab ID: 5100159-20

Lab No: 5100159
Reported: 10/26/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/29/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	0.149			0.0600	EPA 8015/8260	10/05/05	10/05/05	B5J0100
Benzene	"	ND			0.0050	"	"	"	"
Toluene	"	0.0342			0.0050	"	"	"	"
Ethylbenzene	"	ND			0.0050	"	"	"	"
Xylenes (total)	"	0.0228			0.0050	"	"	"	"
Methyl tert-butyl ether	"	0.0520			0.0050	"	"	"	"
Di-isopropyl ether	"	ND			0.0050	"	"	"	"
Tert-amyl methyl ether	"	0.0062			0.0050	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.0050	"	"	"	"
Tert-butyl alcohol	"	ND			0.0500	"	"	"	"
Surrogate: 4-Bromofluorobenzene		88.6 %		39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	13	D-06, QM-06		10	"	"	"	"
Surrogate: Octacosane		93.1 %		50-150		"	"	"	"


Approved By

Basic Laboratory, Inc.
California D.O.H.S. Cert #1677



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voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 20@13'

Matrix: Soil

Lab ID: 5100159-21

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/29/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	16.7	R-07		6.00	EPA 8015/8260	10/06/05	10/05/05	B5J0101
Benzene	"	ND	R-07		0.500	"	"	"	"
Toluene	"	2.75	R-07		0.500	"	"	"	"
Ethylbenzene	"	0.546	R-07		0.500	"	"	"	"
Xylenes (total)	"	2.76	R-07		0.500	"	"	"	"
Methyl tert-butyl ether	"	3.91	R-07		0.500	"	"	"	"
DI-isopropyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-amyl methyl ether	"	ND	R-07		0.500	"	"	"	"
Ethyl tert-butyl ether	"	ND	R-07		0.500	"	"	"	"
Tert-butyl alcohol	"	ND	R-07		5.00	"	"	"	"
Surrogate: 4-Bromofluorobenzene		77.0 %	R-07	39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	ND	QM-06		10	"	"	"	"
Surrogate: Octacosane		96.7 %		50-150		"	"	"	"


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voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 21@6'

Matrix: Soil

Lab ID: 5100159-22

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/29/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Gasoline	mg/kg	0.650			0.0600	EPA 8015/8260	10/06/05	10/05/05	B5J0100
Benzene	"	0.0532			0.0050	"	"	"	"
Toluene	"	0.0197			0.0050	"	"	"	"
Ethylbenzene	"	0.0327			0.0050	"	"	"	"
Xylenes (total)	"	0.0447			0.0050	"	"	"	"
Methyl tert-butyl ether	"	0.0123			0.0050	"	"	"	"
Di-isopropyl ether	"	ND			0.0050	"	"	"	"
Tert-amyl methyl ether	"	ND			0.0050	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.0050	"	"	"	"
Tert-butyl alcohol	"	ND			0.0500	"	"	"	"
Surrogate: 4-Bromofluorobenzene		89.4 %		39-128		"	"	"	"

TPH Diesel & Motor Oil - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Diesel	mg/kg	ND	QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	ND	QM-06		10	"	"	"	"
Surrogate: Octacosane		91.0 %		50-150		"	"	"	"


Approved By

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California D.O.H.S. Cert #1677



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voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549

Attention: Greg Sounhein

Project: ROHNERVILLE 76 SP-140

Description: 22@14'

Matrix: Soil

Lab ID: 5100159-23

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Sampled: 09/29/05 00:00

Received: 10/05/05 11:22

Volatile Organic Compounds - Solid

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Gasoline	mg/kg	ND			0.0600	EPA 8015/8260	10/05/05	10/05/05	B5J0100
Benzene	"	ND			0.0050	"	"	"	"
Toluene	"	ND			0.0050	"	"	"	"
Ethylbenzene	"	ND			0.0050	"	"	"	"
Xylenes (total)	"	ND			0.0050	"	"	"	"
Methyl tert-butyl ether	"	0.0069			0.0050	"	"	"	"
Di-isopropyl ether	"	ND			0.0050	"	"	"	"
Tert-amyl methyl ether	"	ND			0.0050	"	"	"	"
Ethyl tert-butyl ether	"	ND			0.0050	"	"	"	"
Tert-butyl alcohol	"	ND			0.0500	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>89.6 %</i>		<i>39-128</i>		"	"	"	"

TPH Diesel & Motor Oil - Solid

<u>Analyte</u>	<u>Units</u>	<u>Results</u>	<u>Qualifier</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Analyzed</u>	<u>Prepared</u>	<u>Batch</u>
Diesel	mg/kg	ND	QM-06		10	EPA 8015 MOD	10/19/05	10/11/05	B5J0212
Motor Oil	"	ND	QM-06		10	"	"	"	"
<i>Surrogate: Octacosane</i>		<i>98.2 %</i>		<i>50-150</i>		"	"	"	"


Approved By

Basic Laboratory, Inc.
California D.O.H.S. Cert #1677



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voice 530.243.7234 2218 Railroad Avenue
fax 530.243.7494 Redding, California 96001

Report To: SOUNPACIFIC
4612 GREENWOOD HEIGHTS DR
KNEELAND, CA 95549
Attention: Greg Sounhein
Project: ROHNERVILLE 76 SP-140

Lab No: 5100159
Reported: 10/24/05
Phone: (707) 269-0884
P.O. #

Notes and Definitions

S-07 The surrogate recovery for this sample is outside of established control limits. The batch was accepted based on acceptable LCS and MS/MSD recoveries and RPDs.

R-08 The sample was diluted due to sample matrix resulting in elevated reporting limits.

R-07 The sample was diluted due to the presence of high levels of target analytes resulting in elevated reporting limits.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

QM-06 Due to noted non-homogeneity of the QC sample matrix, the MS/MSD did not provide reliable results for accuracy and precision. Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The J flag is equivalent to the DNQ Estimated Concentration flag.

I-03 Sample was received past the EPA recommended holding time.

D-25 The hydrocarbon resembles weathered diesel.

D-10 The heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.

D-08 Results in the diesel organics range are primarily due to overlap from a gasoline range product.

D-06 The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

D-02 Hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the detection limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

< Less than reporting limit

≤ Less than or equal to reporting limit

> Greater than reporting limit

≥ Greater than or equal to reporting limit

MDL Method Detection Limit

RL/ML Minimum Level of Quantitation

MCL/AL Maximum Contaminant Level/Action Level

mg/kg Results reported as wet weight

TTLCL Total Threshold Limit Concentration

STLCL Soluble Threshold Limit Concentration

TCCLP Toxicity Characteristic Leachate Procedure


Approved By

Basic Laboratory, Inc.
California D.O.H.S. Cert #1677

BASIC LABORATORY CHAIN OF CUSTODY RECORD

2218 Railroad Ave., Redding, CA 96001 (530) 243-7234 FAX (530) 243-7494

LAB #:

5100159

CLIENT NAME:

Soun Pacific

PROJECT NAME:

Rohnerville 76

PROJECT #:

SP-140

SAMPLE TYPE:

Soil & water

ADDRESS:

P.O. Box 13

REQUESTED COMP. DATE:

Standard 10/19/05

STATE FORMS?

☐

OF SAMPLES:

1020 23

Kneeland, CA 95549

TURN AROUND TIME: STD ☒ RUSH ☐

PAGE 1 OF 2

PROJECT MANAGER:

Greg Sounhein

PHONE:

FAX:

E-MAIL: greg@

707-269-0884

707-269-0699

sounpacific.com

INVOICE TO:

PO#:

Soun Pacific

SPECIAL MAIL ☐E-MAIL ☒FAX ☐EDT ☐

ANALYSIS REQUESTED

OF BOTTLES

TPHg (EPA 8260)
BTXE (EPA 8260)
500ys (EPA 8260)
TPhd/mo *

REP:

ID#:

SYSTEM#:

GLOBAL ID #:

QC = 1 2 3 4

LAB ID

REMARKS

DATE

TIME

WATER

COMP

SOIL

Rohnerville 76 Soil
Excavation Event
SAMPLE DESCRIPTION

9-26-05

X

1 @ 6'

2

X

X

X

X

1

Report

2 @ 13'

2

Soils in

3 @ 6'

3

mg/kg

4 @ 6'

4

RDT

5 @ 13'

5

9-27-05

6 @ 13'

6

Added Testing

7 @ 6'

7

As/

9 @ 6'

8

Email please

10 @ 12'

9

add TPhd/mo

11 @ 15'

10

To all

9-28-05

8 @ 12'

11

Samples

12 @ 16.5'

12

in

13 @ 6'

13

14 @ 13'

14

15 @ 15'

15

16 @ 6'

16

17 @ 15'

17

9-29-05

X

WT @ 12.5'

5

18 @ 13'

18

19 @ 6'

19

2

X

X

X

X

20

in vials

PRESERVED WITH: HNO₃ ☐H₂SO₄ ☐NaOH ☐ZnAce/NaOH ☐HCL ☒NaThio ☐

OTHER

SAMPLED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY:

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY: (SAMPLES UNVERIFIED)

DATE/TIME:

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY LAB: (VERIFIED)

DATE/TIME:

SAMPLES SHIPPED VIA:

UPS

FEDEX

POST

BUS

OTHER

BASIC LABORATORY CHAIN OF CUSTODY RECORD

2218 Railroad Ave., Redding, CA 96001 (530) 243-7234 FAX (530) 243-7494

LAB #:

5100159

SAMPLE TYPE:

OF SAMPLES:

23

PAGE 2 OF 2

REP:

ID#:

SYSTEM#:

GLOBAL ID #:

QC = 1 2 3 4

LAB ID

REMARKS

21 Report soils
22 in mg/kg.
23 RDT

PROJECT NAME:

Rohnerville 76

PROJECT #:

SP-140

REQUESTED COMP. DATE:

Standard 10/19/05

STATE FORMS?



TURN AROUND TIME: STD ☒ RUSH ☐

ANALYSIS REQUESTED

OF BOTTLES

TPHg (EPA 8260)
BTEX (EPA 8260)
5-Oxys (EPA 8260)
TPHd/mo

CLIENT NAME:

Soun Pacific

ADDRESS:

P.O Box 13

Kneeland, CA 95549

PROJECT MANAGER:

Greg Sounheim

PHONE:

707-269-0884

FAX:

707-269-0699

E-MAIL: greg@

sounpacific.com

INVOICE TO:

PO#:

Soun Pacific

SPECIAL MAIL ☐

E-MAIL ☒

FAX ☐

EDT ☐

WATER
COMP
SOIL

Rohnerville 76 Soil
Excavation Event

SAMPLE DESCRIPTION

DATE

TIME

9-29-05

20 @ 13'

21 @ 6'

22 @ 14'

2

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PRESERVED WITH: HNO₃ ☐ H₂SO₄ ☐ NaOH ☐ ZnAce/NaOH ☐ HCL ☐ NaThio ☐ OTHER _____

SAMPLED BY:

RECEIVED BY:

RECEIVED BY: (SAMPLES UNVERIFIED)

RECEIVED BY LAB: (VERIFIED)

DATE/TIME:

DATE/TIME:

DATE/TIME:

DATE/TIME:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

SAMPLES SHIPPED VIA:

UPS

FEDEX

POST

BUS

OTHER _____

DATE/TIME:

DATE/TIME:

DATE/TIME:

DATE/TIME:

10-03-05

Appendix B

Ben's Truck & Equipment, Inc.
BIO INDUSTRIES, INC.

19760 Callahan Road Red Bluff, CA

P.O. Box 732, Red Bluff, CA 96080 - 530/527-5040 - Fax 530/527-9170

WEIGHMASTER CERTIFICATE:


THIS IS TO CERTIFY that the following described commodity was weighted, measured or counted by a weighmaster, whose signature is on the certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

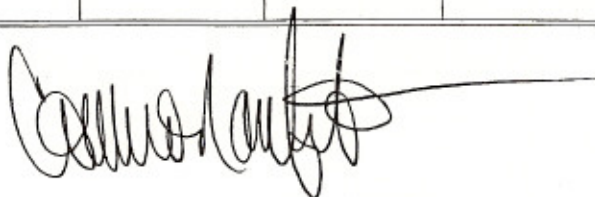
GENERATOR: Rhonerville 76
Fortuna, CA

DATE: 09/28/2005
JOB: T-1092-05

COMMODITY: Contaminated Soil Disposal

	CARRIER NAME	TRUCK NO	TRAILER NO	GROSS LBS	TARE LBS	NET LBS	NET TONS
1	Ben's	33	24E	80740	33300	47440	23.72
2	Ben's	21	21P	81040	28400	52640	26.32
3	Ben's	32	21E	80860	32980	47880	23.94
4	Ben's	38	25E	81200	32920	48280	24.14
5	Ben's	44	23E	79320	32280	47040	23.52
6	Ben's	48	48T	79960	31460	48500	24.25
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 INTERE



Tonnage Total

145.89

Ben's Truck & Equipment, Inc.
BIO INDUSTRIES, INC.

19760 Callahan Road Red Bluff, CA

P.O. Box 732, Red Bluff, CA 96080 - 530/527-5040 - Fax 530/527-9170

WEIGHMASTER CERTIFICATE:

THIS IS TO CERTIFY that the following described commodity was weighted, measured or counted by a weighmaster, whose signature is on the certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

GENERATOR: Rhonerville 76

DATE: 09/27/2005

Fortuna, CA

JOB: T-1092-05

COMMODITY: Contaminated Soil Disposal

	CARRIER NAME	TRUCK NO	TRAILER NO	GROSS LBS	TARE LBS	NET LBS	NET TONS
1	Ben's	41	22E	80300	30940	49360	24.68
2	Ben's	33	24E	81300	33420	47880	23.94
3	Ben's	44	23E	79420	32320	47100	23.55
4	Ben's	21	21P	79660	28400	51260	25.63
5	Ben's	48	48T	79080	31420	47660	23.83
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ENTL...

Tonnage Total

121.63

Ben's Truck & Equipment, Inc.
BIO INDUSTRIES, INC.

19760 Callahan Road Red Bluff, CA

P.O. Box 732, Red Bluff, CA 96080 - 530/527-5040 - Fax 530/527-9170

WEIGHMASTER CERTIFICATE:

THIS IS TO CERTIFY that the following described commodity was weighted, measured or counted by a weighmaster, whose signature is on the certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

GENERATOR: Rhonerville 76
Fortuna, CA

DATE: 09/26/2005
JOB: T-1092-05

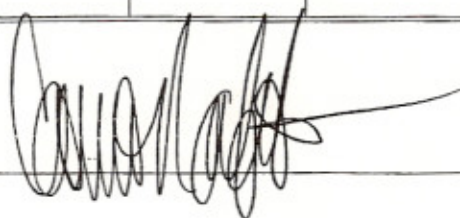
COMMODITY: Contaminated Soil Disposal

	CARRIER NAME	TRUCK NO	TRAILER NO	GROSS LBS	TARE LBS	NET LBS	NET TONS
1	Ben's	44	23E	79560	32400	47160	23.58
2	Ben's	33	24E	79220	32820	46400	23.20
3	Ben's	32	26E	80780	33320	47460	23.73
4	Ben's	41	22E	82820	31020	51800	25.90
5	Ben's	48	48T	78900	31500	47400	23.70
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30							

Tonnage Total

120.11

WEIGHMASTER:



Ben's Truck & Equipment, Inc.
BIO INDUSTRIES, INC.

19760 Callahan Road Red Bluff, CA

P.O. Box 732, Red Bluff, CA 96080 - 530/527-5040 - Fax 530/527-9170

WEIGHMASTER CERTIFICATE:

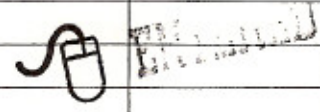
THIS IS TO CERTIFY that the following described commodity was weighted, measured or counted by a weighmaster, whose signature is on the certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

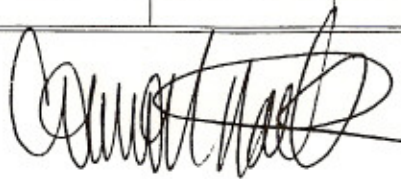
GENERATOR: Rhonerville 76
Fortuna, CA

DATE: 09/29/2005
JOB: T-1092-05

COMMODITY: Contaminated Soil Disposal

	CARRIER NAME	TRUCK NO	TRAILER NO	GROSS LBS	TARE LBS	NET LBS	NET TONS
1	Ben's	25	48P	82000	31180	50820	25.41
2	Ben's	33	24E	79920	33260	46660	23.33
3	Ben's	44	23E	78800	32260	46540	23.27
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Tonnage Total

72.01

Appendix C



Standard Operating Procedures

Groundwater Level Measurements and Free Phase Hydrocarbon Measurements

All SounPacific staff and contractors shall adopt the following procedures any time that groundwater elevations are determined for the purposes of establishing groundwater gradient and direction, and prior to any sampling event.

Wells are to be tested for free phase hydrocarbons (free product) before the first development or sampling of any new well, and in any well that has historically contained free product.

Equipment Checklist

- ☐ Combination water level / free phase hydrocarbon indicator probe (probe)
- ☐ Gauging Data / Purge Calculations Sheet
- ☐ Pencil or Pen/sharpie
- ☐ Disposable Gloves
- ☐ Distilled Water and or know water source on site that is clean
- ☐ Alconox (powder) or Liquinox (liquid) non-phosphate cleaners—do not use soap!
- ☐ Buckets or Tubs for decontamination station
- ☐ Tools necessary to access wells
- ☐ Site Safety Plan
- ☐ This Standard Operating Procedure
- ☐ Notify Job site business that you will be arriving to conduct work.

Procedure

1. Review Site Safety Plan and utilize personal protection appropriate for the contaminants that may be encountered.
2. Access and open all monitoring wells to be measured. Allow wells to equilibrate for approximately 15 minutes before taking any measurements.

3. Decontaminate probe with Alconox or Liquinox solution, and rinse with distilled water.
4. Determine the diameter of the well to be measured and indicate this on the Gauging Data / Purge Calculations Sheet.
5. Words of caution: Please be careful with water level and product meters probes are not attached with high strength material so please make sure to avoid catching the end on anything in the well and make sure not to wind reel to the point that it could pull on the probe. ***If product is suspect in a well, go to step 6, if no product is suspected go to step 7 below.***
6. **When product is present or suspected:** use the product level meter. Clip the static charge clamp to the side of the well casing. Then lower probe into the well through the product/water interface about one foot if possible. Then slowly raise the probe back up through the product/water interface layer and record the level as the tone changes from solid to broken-record this level in the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTP). Continue to raise the probe up through the product until the tone stops completely-record this level on the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTW). Then go to step 8.
7. **When no product is present or suspected:** If no free product is present, record the depth of the water (to the nearest 0.01 foot) relative to the painted black mark on the top of the well casing. Leave the probe in the well just a hair above the water level to ensure the well as equilibrated. As the well rises, the tone will sound. Make sure no increase in water levels have occurred in over a ten-minute period. Water levels can lower as well as rise. Make sure you note when the level you keep lowering the probe to has remained stable for at least ten minutes. Once this has been accomplished, please record this level in the Gauging Data / Purge Calculations Sheet to the nearest 0.01 foot (DTW).
8. Turn off the probe, and use the probe to determine the depth to the bottom of the well relative to the top of the well casing. This is the depth to bottom measurement (DTB).
9. Decontaminate probe and tape by washing in an Alconox/Liquinox solution (***read directions on solution for ratio of water to cleanser***) and use the toothbrush provided to remove any foreign substance from the probe and tape. Then triple rinse probe and tape with clean water and then proceed to take measurements in the next well.
10. If sampling is to occur, proceed to implement SounPacific's Standard Operating Procedure for Monitoring Well Purging and Sampling. If no sampling is to be performed, close and secure all wells and caps.



Standard Operating Procedures

Monitoring Well Purging and Groundwater Sampling

All SounPacific employees and contractors shall adopt the following procedures any time that groundwater samples are to be taken from an existing groundwater monitoring well.

Prior to the implementation of these procedures, the groundwater level **MUST** be measured and the presence of free phase hydrocarbons determined in accordance with SounPacific's Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements.

Equipment Checklist

- ☐ **Gauging Data / Purge Calculations Sheet used for water level determination**
- ☐ Chain of Custody Form
- ☐ pH/ Conductivity / Temperature meter
- ☐ Pencil or Pen
- ☐ Indelible Marker
- ☐ Calculator
- ☐ Disposable Gloves
- ☐ Distilled Water
- ☐ Alconox/liquinox liquid or powdered non-phosphate cleaner
- ☐ Buckets or Tubs for decontamination station
- ☐ Bottom-filling bailer or pumping device for purging
- ☐ Disposable bottom-filling bailer and emptying device for sampling
- ☐ String, twine or fishing line for bailers
- ☐ Sample containers appropriate for intended analytical method (check with lab)
- ☐ Sample labels
- ☐ Site Safety Plan
- ☐ Tools necessary to access wells
- ☐ Drum space on site adequate for sampling event

Procedure

1. Review Site Safety Plan and utilize personal protection appropriate for the contaminants that may be encountered.
2. Measure groundwater levels and check for the presence of free product in accordance with the Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements.

Purging

3. Calculate and record the volume of standing water in each well using the information provided on the Gauging Data / Purge Calculations sheet.
 $(DTB-DTW) \times \text{Conversion Factor} = \text{Casing Volume}.$
4. The purge volume shall be at least three times and no more than seven times the volume of standing water (the casing volume).
5. Purge the well by bailing or pumping water from the well into a calibrated receptacle, such as a five gallon bucket or tub with markings to indicate one gallon increments. Collect purgeate in a 55 gallon labeled drum and store on site. Drum labels should include the date, contents, site number, and SounPacific's name and telephone number.
6. Take measurements of pH, conductivity, temperature, and visual observations to verify the stabilization of these parameters. At least five measurements of these parameters should be made throughout the purging process. The parameters shall be considered stabilized if successive measurements vary by less than 0.25 pH units, 10% of conductivity in μS , and 1°C (or 1.8°F). Continue purging until at least three times the casing volume has been removed, and the measured parameters have stabilized as indicated above. Do not exceed seven casing volumes.
7. Take a final depth to groundwater measurement and calculate the casing volume of the recharged well. Ideally, the casing volume should have recharged to at least 80% of the original measured casing volume before sampling commences. If due to slow recharge rates it is not feasible to wait for the well to fully recharge, then note this on the Gauging Data / Purge Calculation Sheet and proceed to sample following the procedure below.

Sampling

8. **After completing groundwater measurement, and checking for free product if necessary, in accordance with SounPacific's Standard Operating Procedures for Groundwater Level Measurements and Free Phase Hydrocarbon Measurements, and after purging monitoring wells as described above, groundwater samples may be collected.**
9. Slowly lower a clean, previously unused disposable bailer into the well water approximately half of the bailer length, and allow the bailer to slowly fill.
10. Withdraw the full bailer from the monitoring well and utilize the included (clean and unused) bottom-emptying device to fill the necessary sample containers, and seal the container with the included PTFE (Teflon) lined cap.
11. When filling VOAs, fill the VOA completely full, with the meniscus rising above the rim of the bottle. Carefully cap the VOA and invert it and gently tap it to determine whether air bubbles are trapped inside. If the VOA contains air bubbles, refill the VOA and repeat this step.
12. All samples shall be labeled with the Sample ID, the Sample Date, and the Sample Location or Project Number. Use an indelible marker for writing on sample labels.
13. Record all pertinent sample data on the Chain of Custody.
14. Place samples in an ice chest cooled to 4°C with ice or "blue ice". Bottles should be wrapped in bubble wrap, and VOA's should be inserted in a foam VOA holder to protect against breakage. Samples are to be kept at 4°C until delivered to the laboratory. Any transference of sample custody shall be indicated on the Chain of Custody with the appropriate signatures as necessary.
15. Utilize clean, previously unused gloves, bailer and line, and bottom-emptying device for each well sampled.
16. When finished with all sampling, close and secure all monitoring wells.
17. Leave the site cleaner than when you arrived and drive safely.